

Robert N. Shelton
President
The University of Arizona

BUSINESS ADDRESS:

Administration Building Room 712
P.O. Box 210066
Tucson, AZ 85721-0066
Tel: 520-621-5511
Fax: 520-621-9323
e-mail: Robert.shelton@arizona.edu

EDUCATION

University of California, San Diego	Ph.D. 1975 Physics
University of California, San Diego	M.S. 1973 Physics
Stanford University	B.S. 1970 Physics

APPOINTMENTS

2006 - present	President, The University of Arizona
2006 - present	Professor of Physics, The University of Arizona
2001 – 2006	Executive Vice Chancellor & Provost, UNC-Chapel Hill
2001 – 2006	Professor of Physics, UNC-Chapel Hill
1996 - 2001	Vice Provost for Research, U. Calif. President's Office
1990 - 1996	Vice Chancellor for Research, U. Calif. Davis
1987 - 2001	Professor of Physics, U. Calif. Davis
1987 - 1990	Chair, Department of Physics, U. Calif. Davis
1984 - 1987	Professor of Physics, Iowa State University
1981 - 1984	Associate Professor of Physics, Iowa State U
1978 - 1981	Assistant Professor of Physics, Iowa State U
1975 - 1978	Assistant Research Physicist, U. Calif. San Diego

VISITING APPOINTMENTS

Guest Scientist,
Kernforschungsanlage, Jülich, Germany: summer 1981,
National Institute for Materials Science, Tokyo, Japan: spring 1990

Visiting Professor,
Département de Physique de la Matière Condensée,
Université de Genève, Geneva, Switzerland: 1983-1984

PROFESSIONAL ASSOCIATIONS

American Physical Society, Fellow California Science & Technology, Fellow
Phi Beta Kappa American Association for the Advancement of Science Sigma Xi

THE UNIVERSITY OF ARIZONA (2006-present)

The University of Arizona is a premier, student-centered research institution. Established in 1885 as the first university in the Arizona Territory and the state's only land grant institution, the UA embraces its three-fold mission of excellence in teaching, research and public service. Now in its second century of service to the state, the UA has become one of the nation's top 20 public research institutions. It is one of only 62 members in the Association of American Universities, a prestigious organization that recognizes universities with exceptionally strong research and academic programs.

Dr. Robert N. Shelton is the 19th President of The University of Arizona. He will lead The University of Arizona in its quest to advance its standing as one of the country's top public research universities. He will focus on continuing to enhance the overall quality of the University, while increasing diversity and ensuring that the UA is accessible to Arizona students, particularly first generation college students. He embraces the UA's land grant status, its commitment to the people of Arizona and the important bond between the public and public research universities. As The University of Arizona President, Dr. Shelton will report to the Arizona Board of Regents.

UNIVERSITY OF NORTH CAROLINA, CHAPEL HILL (2001-2006)

The University of North Carolina at Chapel Hill is a comprehensive university consistently ranked among the top five public universities in the nation. The strengths of Carolina derive in a great measure from the breadth of schools co-located to facilitate collaborations in teaching, research and public service. The College of Arts & Sciences admits all first-year students and nurtures their academic development for at least their first two years at Carolina. A stellar array of professional schools (Business, Education, Government, Information Science, Journalism, Law, Social Work) attracts the very best students at the undergraduate and post-graduate levels. Five schools (Dentistry, Medicine, Nursing, Pharmacy, Public Health) comprise a powerful academy in the health affairs, all located within the traditional campus.

The Provost is the chief academic officer of the University of North Carolina at Chapel Hill, responsible to the Chancellor for the conduct, coordination and quality of the University's academic and research programs. The most important duty of the Provost is to ensure the academic standards of the University. This is largely accomplished through leadership in supporting quality faculty appointments and promotions. The Executive Vice Chancellor serves as the chief operating officer of the University. These combined responsibilities couple academic priorities and standards to fiscal policy and decisions.

Each of UNC-Chapel Hill's 15 Deans reports to the Provost. The Vice Chancellors for Research and Student Affairs, Associate and Assistant Provosts, and Directors of Centers and Institutes report to the Provost. The University Librarians, Directors of Admissions and Financial Aid and the University Registrar report to the Provost. Continuing Education and Distance Education Directors report directly to the Provost's office. The Provost confers closely with all of these individuals in carrying out his responsibility to the Chancellor for the formulation and implementation of the University's educational policies.

Representative University Policy Boards and Governing Committees

- **Campus Central Budget Committee (chair)**
This small (four-person membership) committee responds to mid-year budget needs, distributing central funds for campus-based initiatives.
- **Campus Facilities Planning Committee (chair)**
UNC Chapel Hill has initiated a \$1.1 billion program for construction and renovation of facilities. Based on a state bond measure that provides \$500 million and generous private donations for the balance, this comprehensive program will define the campus appearance for decades ahead. This committee approves and coordinates all projects, providing a financial overview as well.
- **Chancellor's Cabinet and Council of Vice Chancellors (chaired by the Chancellor)**
These groups of senior leaders advise the Chancellor on priorities and policies.
- **Council of Deans (chair)**
Monthly meetings with formal agendas plus informal "brown bag" lunches enable the academic leaders of the university to set priorities and coordinate initiatives across the multiple schools and college.
- **University Priorities and Budget Advisory Committee (chair)**
In addition to representation from the deans' council, this committee includes faculty, staff and student membership. They provide advice to the Provost in setting university-level priorities for budgetary decisions.
- **U. North Carolina Chief Academic Officers Board (chaired by the Senior V.P.)**
The Provost represents UNC Chapel Hill at these meetings of the sixteen chief academic officers of the UNC system.
- **Executive Committee of the Faculty Council (chaired by Chair of the Faculty)**
Regular participation ensures coordination of issues between the faculty and the administration.

Boards and Councils External to the University (representative selection)

- **The Space Telescope Institute Council (STIC)**
This council advises provides oversight and advocacy for the Space Telescope Science Institute (STScI), i.e. the Hubble Space Telescope.
- **North Carolina School of Science & Mathematics – Board of Trustees**
This governing board for the NCSSM is responsible for all policy decisions of this residential school for juniors and seniors in their high school years.
- **Research Triangle Institute Board of Trustees & Executive Committee**
RTI is an independent, nonprofit organization with a distinguished history in scientific research and technology development.

- Triangle Research Libraries Network Governing Board
This organization fosters cooperation among the academic research libraries of the Research Triangle (Carolina, Duke, NC Central, NC State).
- Triangle Universities Center for Advanced Studies, Inc. Board of Directors
TUCASI promotes the development of Research Triangle Park through collaborations among government, the private sector and local universities. TUCASI works with these groups to set priorities and identify the next generation of research opportunities.
- Global Catalyst Partners, Inc. Advisory Board
GCP is a venture capital firm based in northern California with a worldwide presence. They specialize in developing cutting-edge technologies with an emphasis on the information and communication sectors.

Actions with Early Impact at Carolina

- Academic Initiatives
 - Biomedical Engineering
 - Center for the Study of the American South
 - Class Size Reduction
 - Institute for Advanced Materials, Nanoscience and Nanotechnology
 - Morehead Science Center
 - Office of Clinical Trials
 - Office of Technology Development – expansion
- Academic Plan
- Appointments, Promotions and Tenure Task Force
- Measures of Excellence
- Faculty Diversity Recruitment Program
- Salary Equity Study

Presentations while at UNC Chapel Hill – National Audience

- The NewsHour with Jim Lehrer
Discussion on the Carolina Summer Reading Program featuring “Approaching the Qur’an: The Early Revelations” by Michael Sells – Extensive discussion aired on August 9, 2002.
- AAU Provosts Meeting Panel on International Programs – September 8, 2002
I organized and moderated this panel that examined the sustained impact of September 11 on International Programs at American Universities. Four presenters addressed our mission and motivation and whether there have been substantive changes in the last year. We examined varied methods of organization of international activities within a university and the impact of recent government regulations. Within the current context, we considered the core question of “What does it mean to internationalize a university?”
- National Association of State Universities and Land-Grant Colleges
Member of a three-person panel charged with exploring “The Economics of Higher Education.” I examined the impact on states and thus universities of the national and international economies, stressing areas such as: faculty recruitment and retention, pressures on enrollment, the suitable role of tuition at public universities, extramural fundraising, contrasts between private and public institutions and the forces arguing to “privatize” public universities. November 11, 2002.
- Creating a New Curriculum for Higher Education
This Academic Roundtable was by invitation and was held at the Inauguration of France A. Córdova as seventh chancellor at the University of California, Riverside. The three themes were: The University and Sustainable Regional Development, Diversity and the Academy, The Development of New Professional Schools. March 6, 2003.
- Budget Cuts in Higher Education: Quotation of the Day in The New York Times
“Today’s Headlines” Electronic Edition on August 24, 2003

UC OFFICE OF THE PRESIDENT RESPONSIBILITIES - (1996-2001)

As the Vice Provost for Research I was responsible for providing leadership in building synergy among the UC Offices of the President (UCOP), the campuses, and the Department of Energy (DOE) laboratories to: develop university positions on major policy issues related to research; identify and develop strategic responses to major research opportunities and initiatives, and provide mechanisms to facilitate them; work cooperatively with the University's office of State Governmental Relations in Sacramento on state and state/federal research projects; work with the Associate Vice Provost for Research and Laboratory Programs to ensure oversight of DOE laboratory programs and to foster research collaboration between the campuses and the national laboratories; oversee multi-campus research units and programs; maintain a strong liaison with the Division of University and External Relations, the Division of Health Affairs, Division of Agriculture and Natural Resources, the Office of Technology Transfer, and the Office of Contracts and Grants, as their functions relate to research policy; and work proactively with the Division of University and External Relations to demonstrate the economic and social utility of research to California and the nation.

In addition to the broad responsibilities outlined above, a number of system-wide programs reported directly to the Vice Provost for Research. These multi-campus units embraced the full spectrum of scholarship at the nine campuses and three federal laboratories. The exceptional breadth of programs is illustrated in the following, partial list: All UC Group in Economic History; Humanities Research Institute; Institute for Geophysics and Planetary Physics; Institute on Global Conflict and Cooperation; UC Linguistic Minority Research Institute; UC Observatories; UC Shakespeare Forum; White Mountain Research Station.

As a member of the senior leadership of University of California, my responsibilities included collaboration with colleagues on all aspects of university policy and programs. Some examples of council memberships demonstrate these interactions. Similarly, the research mission of the University had significant impact at the national and international levels. This visibility provided the opportunity to serve on and contribute to numerous research boards and councils, some of which are noted below.

Representative Committees and Councils

- President's Cabinet (Chaired by President)
Small group of academic and administrative leaders at UC Office of the President to discuss major issues for the University
- Provost's Cabinet (Chaired by Sr. V.P. and Provost)
Small group of executive-level leaders in the Division of Academic Affairs to provide advice to the Provost and assume responsibility for matters relating to the academic mission of the University

- Council on Research (Chaired by Shelton)
Campus vice chancellors for research, DOE laboratory deputy directors, faculty senate leaders and UCOP administrators with liaisons to the Office of the Vice Provost for Research discuss and advise on research policy and priorities
- President's Council on the National Laboratories (W. Friend, Bechtel - Chair)
Distinguished scientists responsible for providing advice to the UC President on the management of the three Department of Energy national laboratories
- National Laboratory Coordinating Council (Chaired by two Sr. Vice Presidents)
Small group internal to UC to provide coordination for the oversight and management of the national laboratories
- Technology Transfer Advisory Council (Chaired by Sr. VP Business & Finance)
Campus and central administration experts to advise on policy related to the development and handling of intellectual property
- Industry-University Collaborative Research Steering Council (Shelton co-chair)
Large membership of faculty, campus leaders and UCOP administrators to provide programmatic and fiscal guidance in developing research liaisons to industry
- Outreach Implementation Group (Chaired by Provost)
Small group to develop recommendations by the Outreach Task Force into tangible programs involving UC with K-12 education & community-based programs

Research Boards and Councils (membership unless stated otherwise)

- California Association for Research in Astronomy (Chaired by Shelton, 1997-2000) Governing board for the Keck Telescope Facility - three representatives from UC and three from the California Institute of Technology
- Bay Area Science Infrastructure Consortium, Executive Board
Select group of business, academic and research leaders dedicated to advancing science and technology collaborations in the San Francisco Bay Area
- National Institute of Global Environmental Change Board of Trustees
These scholars advise the UC President and the US DOE on the operation of this Institute with six regional centers in addition to the national center run by UC
- Los Alamos Foundation Board
Governing board for this regional organization charged with promoting educational and economic development programs in northern New Mexico
- California Institute on Energy Efficiency
Responsible for setting research priorities and overall policies to ensure optimal use of research, development and demonstration programs in this field

UC DAVIS - CAMPUS RESPONSIBILITIES - (1990-1996)

As the vice chancellor for research I was responsible for research development and support; technology transfer and intellectual property matters; management or oversight of selected research-related programs and facilities; fiscal and administrative responsibility for organized research units and projects; review and approval of use of human subjects; and conflict of interest disclosures.

Extramural support for research at UC Davis exceeded \$169M for the last fiscal year in which I held this position. During my tenure as Vice Chancellor, this total grew by 49%. The breadth of campus research activities was exceptional. Two schools accounted for approximately 50% of the total; namely, the School of Medicine and the College of Agricultural and Environmental Sciences. The strongest growth during my tenure occurred in the College of Engineering and the College of Letters and Science. Programs in the School of Veterinary Medicine are unique in the state. A separate Division of Biological Sciences gives visibility to a special strength of the Davis campus.

In addition to overall responsibility for support of research, a number of campus-wide programs reported directly to the Vice Chancellor. As examples of the wide range of these research programs, I note the following units that involved scholars from across the campus: Bodega Marine Laboratory, Institute of Toxicology and Environmental Health, Institute of Governmental Affairs, California Regional Primate Research Center, Crocker Nuclear Laboratory, Protein Structure Laboratory, Nuclear Magnetic Resonance Facility.

My responsibilities as vice chancellor for research extended beyond the realm of research oversight and support to include areas of campus-wide governance and leadership. The breadth of this responsibility at the campus level is illustrated in the next section by specific examples of important council assignments. Similarly, my campus position as vice chancellor for research entailed extensive and varied assignments at the UC system-wide level; some examples of which follow. This experience enabled a smooth transition to my current position at the system-wide level.

Representative Committees and Councils - UC Davis campus level

- Academic Leadership & Planning (Chaired by Chancellor)
Small group of academic vice chancellors and vice provosts to provide advice on major academic & fiscal policy issues
- Academic Planning Council (Chaired by Provost)
Large membership of faculty, staff, students and administrators to discuss campus priorities and resource planning
- Faculty FTE Allocation Workgroup (Chaired by Chancellor)
Small group of academic vice chancellors and vice provosts to advise the Chancellor on the requests by academic deans for new faculty positions

- Faculty Recruitment Start-up Costs (Chaired by Shelton)
In collaboration with the academic deans, developed quantitative guidelines for the shared funding of high-cost faculty recruitments

Representative Committees and Councils - UC system-wide level

- University-wide Council on Research (Chaired by Sr. V. P. & Provost King)
Address issues of system-wide coordination in support of research and scholarship
- Technology Transfer Advisory Committee (Chaired by Senior V. P. Kennedy)
Analyzed mechanisms for facilitating technology transfer of university-owned inventions and recommended models of campus autonomy and central coordination for optimal service to the faculty
- Conflict of Interest Subcommittee to Council on Research (Chaired by Shelton)
Identify conflict of interest issues in new federal regulations and recommend action to the Council
- Collaborative Research Working Group (Chaired by Shelton)
Analyzed the current status and recommended new means of promoting campus-national lab collaborative research via the Complementary and Beneficial Activities Fund
- President's Transition Task Force - Committee on Research Activities (Chaired by Chancellor Pister)
Reviewed the organization of the Office of the President with respect to promotion of research and scholarship and made recommendations that would strengthen these activities

Research Boards and Councils - UC system-wide and national levels

- California Association for Research in Astronomy
Governing board for the Keck Telescope Facility - three representatives from UC and three from the California Institute of Technology
- MICRO Policy Board
Working with industry and state government representatives to set policy for collaborative research and development in the California micro-electronics industry
- Board of Directors, Small Ruminant Collaborative Research Support Program
Set major policy for this international research collaboration among multiple US and foreign institutions, funded by US-AID
- National Agricultural Biotechnology Council
One representative of UC at this council that promotes national priorities in biotechnology applied to agriculture

PROFESSIONAL ACTIVITIES

Refereed Publications:	Over 240, listing provided upon request
Professional Meetings:	Over 50 invited talks
Professional Meetings:	Over 100 contributed papers
Research Awards:	During tenure at UC Davis averaged in excess of \$250,000/year in extramural funding
Editor:	<u>Journal of Physics and Chemistry of Solids</u> (Elsevier Press, Oxford, UK)
Reviewer:	Proposals to the National Science Foundation, the US Department of Energy and other federal agencies
Referee:	Manuscripts submitted to <u>Physical Review Letters</u> , <u>The Physical Review B</u> , <u>Physica</u> and other professional journals
Consultant:	Previously served as scientific consultant to Corning, Inc. (NY) and Ceracon, Inc. (CA)
Graduate Student Research:	Served as major professor for 24 Ph.D. and 6 M.S. students (current positions provided upon request)
Undergraduate Research:	Guided 11 undergraduates in directed research (list available); one student received the UC Presidential Award for Excellence in Undergraduate Research
References:	To be provided on request