
General Information

MISSION

Arizona State University has emerged as a leading national and international research and teaching institution with a primary focus on Maricopa County, Arizona's dominant population center. This rapidly growing, multicampus public research university offers programs from the baccalaureate through the doctorate for approximately 49,700 full-time and part-time students through ASU Main in Tempe; ASU West in northwest Phoenix; a major educational center in downtown Phoenix; ASU East, located at the Williams Campus (formerly Williams Air Force Base) in southeast Mesa; and other instructional, research, and public service sites throughout Maricopa County. ASU is a modern university that applies its research capabilities to the rapidly evolving needs of Maricopa County and the state.

Arizona State University's goal is to become a world-class university in a multicampus setting, one of the very best public universities in the nation. Its mission is to provide outstanding programs in instruction, research, and creative activity, to promote and support economic development, and to provide service appropriate for the nation, the state of Arizona, and the state's major metropolitan area. To fulfill its mission, ASU places special emphasis on the core disciplines and offers a full range of degree programs—baccalaureate through doctorate. To become competitive with the very best public universities, ASU recognizes that it must offer quality programs at all degree levels in a broad range of fundamental fields of inquiry. ASU will continue to dedicate itself to superior instruction; to excellent student performance; to original research, creative endeavor, and scholarly achievement; and to outstanding public service and economic development activities. As a result of this dedication, ASU was named to Research Extensive (formerly Research I) status in 1994, recognizing ASU as a premier research institution.

ORGANIZATION

Arizona State University is part of a university system governed by the Arizona Board of Regents, a body with perpetual succession under the constitution and laws of Arizona. The board consists of eight citizens appointed by the governor of the state for terms of eight years, and two students with the elected governor and state superintendent of public instruction as members *ex officio*.

The regents select and appoint the president of the university, who is the liaison between the Arizona Board of Regents and the institution. The president is aided in the administrative work of the institution by the provosts, vice presidents, deans, directors, department chairs, faculty, and other officers. See "Administrative Personnel," page 425.

The academic units develop and implement the teaching, research, and service programs of the university, aided by the university libraries, museums, and other services.

The faculty and students of the university play an important role in educational policy, with an Academic Senate, joint university committees and boards, and the Associated Students serving the needs of a large institution.

ACADEMIC ACCREDITATION AND AFFILIATION

See "Accreditation and Affiliation," page 465.

EQUAL OPPORTUNITY AND AFFIRMATIVE ACTION

It is the policy of ASU to provide equal opportunity through affirmative action in employment and educational programs and activities. Discrimination is prohibited on the basis of race, color, religion, national origin, citizenship, sex, sexual orientation, age, disability, special disabled veteran, other eligible veteran, or Vietnam-era veteran status. Equal employment opportunity includes but is not limited to recruitment, hiring, promotion, termination, compensation, benefits, transfers, university-sponsored training, education, tuition assistance, and social and recreational programs.

ASU is committed to taking affirmative action in increasing opportunities at all levels of employment and to increasing participation in programs and activities by all faculty, staff, and students. Affirmative action is directed toward minority persons, women, special disabled veterans, other eligible veterans, Vietnam-era veterans, and persons with disabilities.

University Policy Prohibiting Discriminatory Harassment

Harassment Prohibited. Subject to the limiting provisions of "Freedom of Speech and Academic Freedom" specified below, it is a violation of university policy for any university employee or student to subject any person to harassment on university property or at a university-sponsored activity.

Harassment Defined. Actions constitute harassment if (1) they substantially interfere with another's educational or employment opportunities, peaceful enjoyment of residence, or physical security, and (2) they are taken with a general intent to engage in the actions and with the knowledge that the actions are likely to substantially interfere with a protected interest identified above. Such intent and knowledge may be inferred from all the circumstances.

Freedom of Speech and Academic Freedom. Neither this nor any other university policy is violated by actions that amount to expression protected by the state or federal constitutions or by related principles of academic freedom. This limitation is further described in the ASU First Amendment Guidelines, the current version of which supplements this policy and is available in the Office of General Counsel.

Relationship to the Work of the Campus Environment

Team. If harassment is discriminatory, it falls within the education, monitoring, reporting, and referral functions of the Campus Environment Team. Harassment is discriminatory if taken with the purpose or effect of differentiating on the basis of another person's race, sex, color, national origin, religion, age, sexual orientation, disability, or Vietnam-era veteran status.

INTERGROUP RELATIONS CENTER

The only center of its kind on a college campus, the Intergroup Relations Center (IRC) works with students, staff, and faculty to promote positive intergroup relations, to prepare students for living in a diverse democracy, to create greater understanding between the different groups that exist at ASU, and to provide faculty, staff, and students opportunities to explore the rich diversity that is part of the ASU campus community. Through structured interaction programs, including intergroup dialogues, story circles, retreats, and institutes and via educational and training workshops, the center promotes diversity as one of the university's greatest assets. The educational work of the center encompasses gender, race/ethnicity, sexual orientation, age, disability status, nationality, adult reentry, and other salient social identities found at ASU.

Some of the programs and initiatives offered by the center include Voices of Discovery, a six-week student intergroup dialogue program that brings together small groups of African Americans and white/EuroAmericans, males and females, American Indians and white/EuroAmericans, Latinos and white/EuroAmericans, gays, lesbians, bisexuals, heterosexuals, and other groups to interact with and learn about each other. Leadership 2000, an annual four-day, off-campus retreat brings together 80 students from many different backgrounds to explore their own and others' diversity. Allies in Action, a diverse group of students sponsored by the IRC, works together to improve intergroup relations on the campus. Intergroup Relations Theatre and Music programs use the arts to interactively involve, entertain, and educate participants about issues of diversity. The center also offers programs for faculty and staff addressing issues of diversity in the workplace and the classroom and custom-designed programs, consultation, and intergroup conflict mediation services for a wide range of campus offices, academic departments, and student groups.

For more information, visit the center in SSV 278, call 480/965-1574, or access the IRC Web site at www.asu.edu/provost/intergroup.

HISTORY OF ARIZONA STATE UNIVERSITY

On February 26, 1885, House Bill 164, "An Act to Establish a Normal School in the Territory of Arizona," was introduced in the 13th Legislative Assembly of Arizona Territory by John Samuel Armstrong. The bill, strongly supported by Charles Trumbull Hayden of Tempe, passed the House on March 6 and the Council on March 11 and was signed by Governor F.A. Tritle on March 12, 1885, thereby founding the institution known today as Arizona State University. Under the supervision of Principal Hiram Bradford Farmer, instruction was instituted on February 8, 1886, when 33 stu-

dents met in a single room on land donated by George and Martha Wilson of Tempe.

The institution began with the broad obligation to provide "instruction of persons...in the art of teaching and in all the various branches that pertain to good common school education; also, to give instruction in the mechanical arts and in husbandry and agricultural chemistry, the fundamental law of the United States, and in what regards the rights and duties of citizens."

With the growth of the state, especially the surrounding Phoenix metropolitan area, the school has carried forward this charter, accompanied by successive changes in scope, name, and governance.

The Early Years. For the first 14 years, the school was governed by six principals. At the turn of the century and with another new name, Normal School of Arizona, President Arthur John Matthews brought a 30-year tenure of progress to the school.

He assisted in changing the school to an all-college student status; the Normal School had enlisted high school students who had no other secondary educational facilities in Arizona. He embarked on a building schedule that included the state's first dormitories. Of the 18 buildings constructed while Matthews was president, six are still in use. His legacy of an "evergreen campus," with the import of many shrubs and trees and the planting of Palm Walk, continues to this day: the main campus is a nationally recognized arboretum.

Matthews also saw to it that the Normal School was accredited outside the state. His service on national education organization boards was conducive to this recognition. The school remained a teacher's college in fact and theory during Matthews' tenure, although the struggle to attain status as a university was ongoing.

An extraordinary event occurred March 20, 1911, when former President Theodore Roosevelt visited the Tempe school and spoke from the steps of Old Main. He had dedicated the Roosevelt Dam the day before and was impressed with Arizona. He noted that construction of the dam would benefit central Arizona's growth and that of the Normal School. It would be another year before the territory became a state.

During the Great Depression, Ralph W. Swetman was hired as president for a three-year term. This was a time of uncertainty for educational institutions. Although enrollment increased due to the depression, many faculty were terminated and faculty salaries were cut. The North Central Association became the accrediting agency for Arizona State Teachers College.

The Gammage Years. In 1933, Grady Gammage, then president of Arizona State Teachers College at Flagstaff, became president of Arizona State Teachers College at Tempe, a tenure that would last for nearly 28 years.

The Graduate Division was created in 1937, and the first master's program was established the same year.

On March 8, 1945, the three state institutions of higher learning came under the authority of one Arizona Board of Regents, which oversees ASU today.

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ASU Research Park

Tim Trumble photo

The phenomenal growth of the college began after the end of World War II. Dr. Gammage had foreseen that the G.I. Bill of Rights would flood campuses everywhere with returning veterans. Many of the veterans who had received military training in Arizona had fallen in love with the state and vowed to return after the war. The numbers within one year were staggering: in the fall semester of 1945, 553 students were enrolled; over the weekend semester break in January 1946, enrollment increased 110 percent to 1,163 students. Successive semesters saw continuing increased enrollment.

Like his predecessor, Dr. Gammage oversaw the construction of a number of buildings. His greatest dream, that of a great auditorium, came to fruition after his death. He laid the groundwork for it with Frank Lloyd Wright, who designed what is now the university's hallmark building, Grady Gammage Memorial Auditorium, built in 1964.

Years of Growth and Stature. During the 1960s, with the presidency of Dr. G. Homer Durham, Arizona State University began its academic rise with the establishment of several new colleges (the College of Fine Arts, the College of Law, the College of Nursing, and the School of Social Work) and the reorganization of what became the College of Liberal Arts and Sciences and the College of Engineering and Applied Sciences. Perhaps most important, the university gained the authority to award the Doctor of Philosophy and other doctoral degrees.

The next three presidents—Harry K. Newburn, 1969–71, John W. Schwada, 1971–81, and J. Russell Nelson, 1981–89—and Interim President Richard Peck, 1989, led the university to increased academic stature, expansion of the campuses, and rising enrollment.

A transformation of ASU has taken place under the leadership of Dr. Lattie F. Coor, who became the university's 15th president on January 1, 1990. The university has grown to serve the Valley of the Sun through multiple campuses and the College of Extended Education, an architecture that positions ASU to meet future enrollment growth.

The quality of undergraduate students and programs has improved substantially during the past decade. In 2001, ASU had its best year in history in prestigious national scholarship competitions. Students brought home the Rhodes, Truman, Marshall, Goldwater, and Udall awards, making ASU one of only two public universities in the nation to be represented in all five top scholarship awards. Enrollment in the Barrett Honors College has more than tripled since 1988, from 800 to more than 2,600 students majoring in all disciplines throughout ASU.

Coor's strong commitment to increased diversity is reflected in the faculty and student body. During the last decade, the university's minority enrollment has more than doubled. This fall, minorities represent 30 percent of the university's freshman class and nearly 20 percent of the entire enrollment.

With regard to ASU faculty, the percentage of minorities has increased to 15.3 percent—up from 10.3 percent five years ago. ASU has the highest number and highest proportion of Hispanic faculty of any major U.S. research university.

ASU has become one of the leading research universities in America, developing nationally recognized programs in a number of fields, including accounting; astrobiology; design science; ecology and evolutionary biology; electron microscopy; engineering; exercise science; music; nanotechnology; psychology; and solid-state science. As part of Coor's vision for the economic vitality of Arizona, ASU is committing to a strategic focus on four critical research areas that are essential in the New Economy: materials; biomedicine and biotechnology; information science and technology; and manufacturing. These initiatives already have a significant impact on the Arizona economy, representing more than 207,000 jobs, 2,000 businesses, and \$1.5 billion in exports in the first quarter of 2000.

Part of Coor's legacy to the university—before retiring at the end of the 2002 academic year—is a successful fundraising campaign. Through private donations, primarily from the local community, \$500 million is being invested in targeted areas that most significantly impact the future of ASU. Among the campaign's achievements are the naming and endowing of the Barrett Honors College, the Katherine K. Herberger College of Fine Arts, and the Morrison School of Agribusiness and Resource Management at ASU East; the creation of many new endowed faculty positions; and hundreds of new scholarships and fellowships.

Research Extensive Status. ASU was named to Research Extensive (formerly Research I) status by the Carnegie Foundation for the Advancement of Teaching in early 1994.

Nationally, 88 universities have been granted this status, indicating successful garnering of support for research projects and educating future scientists.

Athletics

The original nickname for the Normal School of Arizona athletic teams was the Owls. Athletics other than Sunday hikes and lawn tennis were not part of the early curriculum.

During President Matthews' tenure, some team competition began. The Tempe Bulldogs saw some interesting and rough competition with the University of Arizona Wildcats. In the 1940s, the college's teams became the Sun Devils.

In 1979, the university joined the Pacific-10 Conference. In 1987, ASU became the first Arizona football team to play in the Rose Bowl, defeating the University of Michigan Wolverines 22–15. ASU made its second appearance in 1997 against Ohio State.

In 2000, ASU finished ninth nationally in the Sears Directors' Cup, which recognizes the top athletic programs in the country. Six teams finished in the top 20 nationally with three teams posting top 10 finishes. Men's swimming and diving finished 10th, women's tennis finished in a tie for fifth, while men's indoor track and field also finished 10th.

Graduate College

Graduate education at ASU began with the creation of the Graduate Division in 1937 and the establishment of the first master's program the same year. For the first 20 years, graduate education focused exclusively on professional programs in education. During the 1950s as the campus grew and broadened its mission, a number of new degree programs appeared, significantly enhancing the role of graduate studies on the campus. By the early 1960s, graduate programs were established in many disciplines; humanities, social science, and science fields were well represented, as were professional programs in business, engineering, fine arts, and public administration. With this expansion of the mission of the campus came new facilities and the development of a wider range of research interests and activities.

Major changes in the nature and role of graduate education came in the early 1960s when the first Ph.D. programs were established in chemistry, education, engineering, English, physics, and psychology. The research focus of campus programs grew at a rapid pace. Master's programs matured as doctoral programs were added. From the late 1960s to the present, campus facilities for instruction, research, and advanced study significantly expanded to support university programs with the construction of new laboratories, classroom structures, and two large libraries—including a new main library and a separate science and engineering library.

UNIVERSITY CAMPUSES AND SITES

ASU Main. ASU Main is located near the heart of metropolitan Phoenix in the city of Tempe (population 158,625). Nearby are the municipalities that make up the fast-growing Valley of the Sun: Chandler, Gilbert, Glendale, Mesa, Scottsdale, and other communities.

ASU Main comprises more than 700 acres and offers outstanding physical facilities to support the university's educational programs. The campus is characterized by broad

pedestrian malls laid out in an easy-to-follow grid plan, spacious lawns, and subtropical landscaping.

ASU East. ASU East opened at the Williams Campus in the fall of 1996 and now serves approximately 2,400 students. ASU East offers many of the features of a small residential college in a rural area while providing access to the resources of a major research university and the amenities of a large metropolitan area.

The campus offers excellent educational facilities and residential opportunities, which include a choice of traditional residence halls or two- to five-bedroom homes. A shuttle service provides transportation between ASU East and ASU Main. The 600-acre ASU East campus is easily accessible via major interstate routes.

For more information, see "ASU East," page 434.

ASU West. A vital component of the ASU multicampus system, ASU West serves nearly 6,000 undergraduate and graduate students on its growing campus. ASU West provides a friendly, small-campus atmosphere along with the services, resources, and expertise of a nationally acclaimed, PAC-10 research university. Founded in 1984 with upper-division and master's programs, ASU West became a four-year university campus in 2001. The faculty and staff share a deep commitment to learner-centered education.

ASU West prides itself on serving the diverse needs of students who balance academics with the multiple demands of work and family through convenient scheduling of small classes. The campus mission balances teaching and research, faculty-student collaboration, interdisciplinary perspectives, and many thriving university-community partnerships. Courses at ASU West lead to 29 bachelor's degrees, nine master's degrees, and eight professional certificates.

The campus is located in northwest Phoenix between 43rd and 51st Avenues on West Thunderbird Road. The core campus was completed in 1991 and features a variety of state-of-the-art classroom and student service buildings, including Fletcher Library, the Sands Classroom Building, the Computer Laboratory/Classroom Building, Kiva Lecture Hall, the University Center Building, and the Faculty/Administration Building.

For more information, see "ASU West," page 444. For complete information and course listings, see the *ASU West Catalog*.

ASU Extended Campus. The ASU Extended Campus (www.asu.edu/xed) goes beyond the boundaries of the university's three physical campuses to provide access to quality academic credit and degree programs for working adults through flexible schedules; a vast network of off-campus sites; classes scheduled days, evenings, and weekends; and innovative delivery technologies, including television, the Internet, and Independent Learning. The ASU Extended Campus offers programs in partnership with the campuses and colleges of ASU, including a variety of professional continuing education programs. The ASU Downtown Center is the anchor location of the ASU Extended Campus. Lifelong learning opportunities are offered to students of all ages throughout Maricopa County and Arizona through the ASU Extended Campus.

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ASU Downtown Center. Located in downtown Phoenix, 502 E. Monroe, the ASU Downtown Center offers a variety of daytime and evening courses of interest to employees in private businesses and government agencies and to individuals seeking personal growth and enrichment. These courses are scheduled at a variety of convenient times and offered through various modes of delivery. Professional continuing education, certificate programs, and lecture series are also available. Access to ASU library information and resources, ASU computing resources, and the Internet is available through the center's computer lab.

ASU Research Park. The mission of the ASU Research Park (researchpark.asu.edu) is to enhance Arizona's high-value research-based economic development and to build the university's capacity to educate and advance knowledge. To this end, the Research Park serves to attract new corporate and regional headquarters and research and development firms to Arizona—headquarters and firms that broaden the base for potential research, interact with graduate students, consult with university faculty, cosponsor seminars on research topics, and provide employment opportunities for ASU graduates.

The Research Park has numerous major tenants, including ASM Lithography, Avnet CMG, Bright Horizons Family Solutions, Iridium Satellite, Motorola Labs, Motorola University, National Association for Purchasing Management, Philips Electronics, and Walgreens Healthcare Plus. The Research Park contains over 1.5 million square feet of developed space on 320 acres.

Camp Tontozona. Located in the famed Mogollon Rim country near Kohl's Ranch, northeast of Payson, this continuing education facility serves the needs of academic departments conducting teaching and research in mountain terrain. The camp is also available to faculty, staff, graduate students, and alumni for family use. For more information, call 480/965-6851.

Deer Valley Rock Art Center. Deer Valley Rock Art Center, located two miles west of the Black Canyon Freeway on Deer Valley Road, is operated by the ASU Department of Anthropology in consultation with the Hopi, Yavapai, and Gila River Indian tribes. It includes more than 1,500 petroglyphs that cover the eastern slope of Hedgpeth Hills. For more information, call 623/582-8007.

The Arboretum. The Arboretum at Arizona State University is the entire 722-acre main campus. The Arboretum is home to a flourishing oasis of plants from around the world. This virtual outdoor classroom includes more than 300 species of trees and other woody ornamental and herbaceous plants from diverse geographic regions as well as the Sonoran Desert. The Arboretum contains one of the best collections of palms and conifers in the desert Southwest and a growing collection of native Southwestern plants. The Arboretum's date palm collection has received international recognition by the American Association of Botanical Gardens and Arboreta North American Plant Collection Consortium.

The Arboretum's collection began with Arthur J. Matthews. By the time Matthews' 30-year presidency was finished,

nearly 1,500 trees of 57 species and more than 5,700 feet of hedges were planted. One of his most enduring landscape projects was the planting of Mexican Fan Palms along Palm Walk in 1916, which extends from University Drive south to the Student Recreation Complex. Today the Arboretum has expanded its collection to include nearly 4,000 trees of 164 species/varieties.

The Arboretum is open to the public free of charge 365 days a year from dawn to dusk. Walking tours of the various collections and points of interest are designated by signage denoting those areas. Many of the plants in the collection throughout campus are marked with identification plaques.

UNIVERSITY LIBRARIES AND COLLECTIONS

The collections of the university's libraries comprise more than 3.6 million volumes, approximately 7 million microform units, and more than 33,500 periodical and serial subscriptions. Computer access to commercially and locally produced databases and the ability to borrow research materials from other libraries enhance local resources. ASU is a member of the Association of Research Libraries and the Center for Research Libraries.

For telephone numbers, see the "Noble Science and Engineering Library," page 358. For more information, access the Web site at www.asu.edu/lib.

Charles Trumbull Hayden Library. The Charles Trumbull Hayden Library, designed by Weaver and Drover in 1966, houses the largest multidisciplinary collection at ASU. In addition to the open stack areas, separate collections and service areas include Access for Disability Accommodations; Circulation; Current Periodicals and Microforms; Government Documents Services; Interlibrary Loan and Document Delivery Services; Library Instruction, Systems, and Technology (L.I.S.T.); Reference; Reserve; Special Collections; and Archives and Manuscripts, which includes the Arizona Collection, the Chicano Research Collection, the Benedict Visual Literacy Collection, and the Labriola National American Indian Data Center. Archives and Manuscripts holds the papers of several major Arizona political figures, including Senator Carl Hayden, with historic materials about Arizona, Chicano, and Indian affairs.

The Special Collections department includes the Child Drama Collection, collections of materials by and about William S. Burroughs, the Press of Thomas Bird Mosher, and the Patten Herbal Collection. For more information, access the Web site at www.asu.edu/lib/hayden.

Architecture and Environmental Design Library.

Located in the College of Architecture and Environmental Design/North building, this library has a general collection that focuses on architecture, design, graphic design, interior design, landscape architecture, and planning. The library's Special Collections and Archives, Architectural Drawings Collection, and Materials Resource Center provide additional opportunities for research. For more information, access the Web site at www.asu.edu/caed/AEDlibrary.

Arizona Historical Foundation. Under a cooperative agreement with ASU, the Arizona Historical Foundation houses a library of several thousand volumes, manuscript collections, maps, and photographs, and a large collection

of audiovisual materials. Housed in the Charles Trumbull Hayden Library, the collection's focus is on the history of Arizona and the Southwest. For more information, access the Web site at www.users.qwest.net/~azhistoricalfdn.

Fletcher Library. Located at the ASU West campus, Fletcher Library utilizes a range of electronic systems, from compact discs to telecommunications networks, to provide access to resources and delivery of materials. Its holdings include more than 315,000 volumes, 5,000 serial subscriptions, and 1.4 million microforms selected to complement ASU West course offerings. For more information, access the Web site at www.west.asu.edu/library.

Law Library. The John J. Ross–William C. Blakley Law Library is located on McAllister Avenue. See “Organization,” page 71, for more information.

Music Library. A large collection of music scores, recordings, books, music reference materials, and listening facilities for individuals and groups is located on the third floor of the Music Building, West Wing. For more information, access the Web site at www.asu.edu/lib/music.

Daniel E. Noble Science and Engineering Library. The Daniel E. Noble Science and Engineering Library houses books, journals, and microforms in the sciences, engineering, and nursing; the Map Collection; and the U.S. Patent and Trademark Depository. For more information, access the Web site at www.asu.edu/lib/noble.

University Archives. The University Archives collection is available for use at the Luhrs Reading Room in Hayden Library. The collection (1885–present) comprises university theses and dissertations; administrative records of the university; historical photographs and personal papers of faculty, staff, and alumni; and student, faculty, and official university publications. The historic University Archives Building on Tyler Mall is the home of the 1907 Gallery, which hosts exhibits of historical photographs from the collections of the Department of Archives and Manuscripts. For more information, access the Web site at www.asu.edu/lib/archives/archives.htm.

Video Resources. Located in ECA 100, Video Resources supports a variety of educational media services, including reserve videotapes of all ASU courses broadcast on cable television and ITFS, video viewing/study carrels, and a studio facility for students and faculty. In addition, Video Resources houses thousands of video titles in the ASU Media circulating collection that may be checked out for three days. Special Collections include the WorldFest Video Archive, Horizon, C-SPAN Booknotes, and C-SPAN I and II. Patrons with a current university ID may check out any available videotape for three days. Interlibrary loans and video booking may be scheduled by calling 480/965-7564. For more information, call 480/965-5046, or access the Web site at www.asu.edu/lib/video.

PERFORMING AND FINE ARTS FACILITIES

ASU Art Museum. The ASU Art Museum serves students and scholars within and beyond the university and as a cultural resource for the Phoenix Metropolitan area. Addition-

ally, the museum serves a public beyond the immediate area through traveling exhibitions and publications that not only document the exhibitions but also offer critical insight into the museum's areas of concentration.

Exhibitions, education programs, and publications are interdisciplinary and educational and are designed to engage viewers with art that is relevant to their lives. New technologies in the content of art and in the approaches to reaching new audiences are eagerly and openly adopted.

Collections and exhibitions focus on contemporary art, particularly new media and new methods of presentation; art by Latin American artists; art from the Southwest; prints, both historic and contemporary; and crafts, emphasizing American ceramics. The museum was founded by a gift of historic American paintings, which are on continuous display, including works by Gilbert Stuart, Albert Pinkham Ryder, Winslow Homer, Georgia O'Keeffe, and Romare Bearden. The contemporary art holdings include works by Nam June Paik, Lorna Simpson, Vernon Fisher, Sue Coe, and Enrique Chagoya. Exhibitions and collections are housed in galleries and study rooms within the international award-winning Nelson Fine Arts Center.

Educational programs include artist residencies and dialogs with classes, a student docent program, internships and research assistanceships, lectures and symposia, in-gallery materials, special curricula-based school programs, and school and public tours. For information on upcoming exhibitions and programs, call 480/965-2787.

ASU Downtown Center Galleria. The Galleria, located on the second floor of the ASU Downtown Center, features work by ASU faculty, staff, students, and local artists. The Galleria is a member of Artlink First Friday's and the Phoenix Art Detour. Open Monday through Saturday, from 8 A.M. to 5 P.M., the Galleria features new and different works each month. For information on current or upcoming exhibitions, call 480/965-3046.

Computing Commons Gallery. One of the unique features of the Computing Commons building is the gallery located off the main lobby in the northwest corner of the building. This unique gallery is designed for showcasing technology-based artwork as well as more traditional two-dimensional graphic presentations. Now is an exciting time for the arts, as technology-based tools and techniques open new avenues for creativity. Such creativity is reflected in the Computing Commons Gallery's exhibits.

Dance Multimedia Learning Center. The Department of Dance Multimedia Learning Center is a facility designed to promote and encourage the use of media and computer technology in dance education and performance at ASU.

Dance Studio Theatre. The Dance Studio Theatre is a 300-seat performance space that is the mainstage performance site for the 12 formal and informal concerts produced annually by the Department of Dance. The theatre is one of the only dance spaces in the country that is designed with interactive and telematic capabilities. The facility uses video-based motion sensing and enables dancers to interact with sound, lighting, images, and video in performance. High-speed Internet connectivity enables this space to connect

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with other telematic spaces for dual, multisite, and Web performances.

Drama City. Housed in a 50-year-old former church, Drama City is the primary performance venue for the Institute for Studies in the Arts. The space is a black box, 60 by 30 feet with fixed lighting positions and flexible control stations. The area can seat up to 100 and is equipped for performance or installation pieces. The facility also houses a wide range of technology for performance and presentation, including video projection, automated luminaires, and a unique computerized control system for integrated media usage.

Gallery of Design. Housed in the College of Architecture and Environmental Design, the Gallery of Design features traveling exhibitions on design and urban issues.

Paul V. Galvin Playhouse. Built to stage the largest productions of the ASU Theatre, the Paul V. Galvin Playhouse is a 496-seat proscenium-stage theatre set at the east end of the Nelson Fine Arts Center. The Department of Theatre's annual season of 12 to 15 plays also includes productions in the Lyceum and Prism theatres and the Nelson Fine Arts Center Studios.

Grady Gammage Memorial Auditorium. A versatile center for the performing arts designed by Frank Lloyd Wright and named for the late ASU President Grady Gammage, Grady Gammage Memorial Auditorium seats 3,000 and has won wide acclaim for its design and acoustics. In addition to the great hall and related facilities—including the Aeolian-Skinner organ contributed by Hugh W. and Barbara V. Long—the building contains classrooms and workshops for the Herberger College of Fine Arts.

The Intelligent Stage. The Intelligent Stage is a production and performance facility designed to explore the possibilities of interactive stage performance. The facility includes a sprung floor; 30 dimmers and a four channel sound system; a composer workstation; workstations for designing interactive MIDI performances; and a movement sensing, image-processing workstation. All are networked together for multimachine performance and production. Resident artists and technologists provide design and logistical support for projects in the facility.

Katzin Concert Hall. Located in the new music building expansion, the Katzin Concert Hall seats 350 people. Primarily used for solo and chamber music recitals, the hall houses a nine-foot Hamburg concert Steinway piano. The acoustics are enhanced by the maple-paneled stage and the multifaceted walls and ceiling.

Louise Lincoln Kerr Cultural Center. Located in Scottsdale, the Louise Lincoln Kerr Cultural Center offers cultural events, especially in the performing arts, to the community.

Lyceum Theatre. A small but technically sophisticated 164-seat proscenium theatre, the Lyceum Theatre is a venue for faculty productions and a laboratory for the work of student playwrights, directors, and actors.

Music Theatre. As part of the music complex, the Music Theatre, modeled after the Wagnerian Theatre in Bayreuth, Germany, rises five stories and seats an audience of 500. This theatre is the home of many operatic and musical productions.

J. Russell and Bonita Nelson Fine Arts Center. Designed by Albuquerque architect Antoine Predock, the J. Russell and Bonita Nelson Fine Arts Center is a spectacular, 119,000-square-foot, village-like aggregate of buildings that includes five galleries of the ASU Art Museum, the Paul V. Galvin Playhouse, the University Dance Laboratory, seven specialized theatre and dance studios, a video studio, and a variety of scenic outdoor features, including courtyards, fountains, pools, and a 50-by-100-foot projection wall designed for outdoor video.

Northlight Gallery. The Northlight Gallery is dedicated to museum-quality exhibitions of historical and contemporary photography. Located in Matthews Hall, it is open during the academic year.

Organ Hall. Located in the new music building expansion, the Organ Hall houses the Fritts Organ. This tracker-action pipe organ is designed to capture the qualities of baroque European organs. The hall is designed to complement the organ with a barrel-vaulted ceiling and wooden benches to seat 140 persons.

Prism Theatre. The Prism Theatre is an alternative black box space devoted to student productions.

Recital Hall. Located on the fifth floor of the Music Building, the Recital Hall is an intimate 125-seat facility that opens onto a rooftop courtyard.

Sundome Center for the Performing Arts. As America's largest single-level theatre, the Sundome Center for the Performing Arts in Sun City West has 7,169 seats. The theatre is equipped with sophisticated, state-of-the-art lighting systems, and a single-span roof affords each seat a clear view. As one of Arizona's premier entertainment venues, the Sundome provides an array of top entertainment from Las Vegas-style concerts to classical ballets to celebrity lectures.

Television Station KAET. KAET, Channel 8, is the university's PBS station. Studios of the award-winning station are located in the Stauffer Communication Arts Building. To operate 24 hours a day, KAET employs more than 50 ASU students and interns. To learn more about KAET-TV, access its Web site at www.kaet.asu.edu, or call 480/965-3506.

University Dance Laboratory. A flexible performance space within the Nelson Fine Arts Center, the University Dance Laboratory is designed specifically for experimental dance productions. Along with the Dance Studio Theatre in the Physical Education Building East, the University Dance Laboratory is used by the Department of Dance for experimental performances.

Harry Wood Gallery. Housed in the Art Building (ART 120), the Harry Wood Gallery provides temporary exhibitions of the visual arts during the academic year.

COMPUTING FACILITIES AND SERVICES

Computers are fundamental tools for learning, instruction, and research in every college and department at ASU. The Information Technology (IT) department provides a variety of computing equipment and services available for use by students, faculty, and staff. IT also provides programming, statistical, graphics, and other applications for micro-computers and mainframe computing systems. University-wide electronic mail and the library's online catalog are accessible through a high-speed campus network and from off campus via the Internet.

A wide range of university information is available online at www.asu.edu, the official ASU Web site. Prospective and current students can find details regarding undergraduate and graduate degree programs, financial assistance, housing, and student activities. The ASU Web site is also the gateway to many online services, including

1. finding and registering for classes;
2. viewing online grade reports;
3. checking e-mail and creating personal and course Web pages;
4. accessing courses online via myASU, the university's customizable portal;
5. viewing campus event calendars;
6. searching the student-faculty-staff directory;
7. browsing general and graduate catalogs; and
8. obtaining information about ASU athletics.

IT provides several service centers, described below, for the ASU academic community.

Computing Commons. The Computing Commons building (CPCOM) provides a "technology hub" that draws together students, faculty, and staff from all disciplines on campus in an environment conducive to maximum creative interaction. The building and its facilities have drawn national recognition and acclaim as a model for the support of instruction and research in a technology-based environment. The Computing Commons houses a 246-workstation computing site, seven electronic classrooms, a Research Support Lab, the Customer Assistance Center, a computer store, and a technology-based gallery (see "Computing Commons Gallery," page 27).

Computing Sites. In addition to the Computing Commons Atrium, there are three additional computing sites located on the ASU Main campus, available for ASU faculty, staff, and students with an ASURITE UserID. Site configurations and hours of operation vary; current information is available on the Web at www.asu.edu/it/fyi/sites.

ASU Downtown Center Computer Lab. The ASU Downtown Center offers an alternative to the computer labs at ASU Main. This facility features 20 Pentium III-800 Mhz computers—all loaded with Microsoft Windows 2000 and Office 2000, Internet Explorer, Netscape, and other software. A high-speed laser printer and a color flatbed scanner are available, and faculty may use the ceiling-mounted computer projection system. The ASU Downtown Center is located in downtown Phoenix. It is a unique educational,

applied-research, and community-service facility designed to address the multifaceted urban opportunities of the central Phoenix community. For more information, call 480/965-3046, or access the Web site at www.asu.edu/xed/dtccplab.

Computer Accounts. Computer Accounts, located in CPCOM 105, assists users with account access issues (including lost passwords), disk space quotas, accounts for non-ASURITE services (including mainframe computer access), and other account-related services. Most computing services are accessible through the standard ASURITE UserID and password, available from self-subscription workstations located in a variety of on-campus locations or online at www.asu.edu/asurite. More information about Computer Accounts is available on the Web at www.asu.edu/it/fyi/accounts.

Customer Assistance Center. The Customer Assistance Center, located in CPCOM 202, offers a library of reference manuals, computing periodicals, and other information concerning computing systems and software. Self-paced training is available for various software applications running under the Windows or Unix operating systems. The center also distributes communication, virus protection, and other site-licensed software, as well as site-specific documentation in a "print-on-demand" format. Print on demand is also available on the Web at www.asu.edu/quicklook. More information about the center is available from the Web site at www.asu.edu/cacenter.

Help Desk/Consulting. The IT Help Desk provides ASU students, faculty, and staff with centralized systems information and first-level assistance in resolving computing problems. Services are available by telephone at 480/965-6500, on the Web at www.asu.edu/helpdesk, and in person at the Customer Assistance Center, CPCOM 202. The IT Help Desk assists with data recovery and repair; AFS filespace and permissions for Web sites; communication, e-mail, and virus protection software; and computing and equipment problem referral.

Instruction Support (IT/IS). Instruction Support serves as a development center for the use of technology in the design and delivery of instruction. Staffed with students, faculty, and researchers skilled in the areas of system design, graphics, interactive software, networked delivery, and digital video, the innovation-driven group pushes the development of instruction to the limits of available technology. From this perspective, IT/IS fosters technological innovation by serving as a research and development unit, a production group, and a training facility.

IT/IS collaborates with faculty in the coordination of cross-disciplinary research and production projects relating to the integration of technology with education. Through partnerships with faculty and groups outside ASU, grant-writing teams are able to leverage support not otherwise available to a single academic unit or faculty member. Central to effective support services is the establishment of a partnership among the various support units within the university. IT/IS coordinates the efforts of these groups—which include the College of Extended Education,

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University Libraries, Disability Resources for Students, and the Office of Research and Creative Activities—to provide faculty with a wide array of instruction support services.

IT/IS offers consultation sessions tailored toward enhancing the instructional use of technology by the university teaching community. Sessions range from an introduction to technology in education through advanced and customized approaches for instructors in specific programs.

More information about IT/IS is available from the Web site at is.asu.edu.

Instruction Support (IS) Lab. The IS Lab provides an environment in which faculty may seek and receive one-on-one, guided, or independent support for course development and delivery. Expert staff work closely with faculty to refine and develop their skills and confidence in the design and delivery of instruction through a variety of technology-supported means, both synchronous and asynchronous. Located in CPCOM 213, the IS Lab provides faculty, university professionals, and graduate students with a unique opportunity to integrate technology with instruction. The IS Lab sponsors workshops and demonstrations and serves as a dynamic clearinghouse of information and referrals for effective integration of technology with education.

Research Support (RS). Research Support provides assistance to faculty, staff, and student researchers engaged in scientific and creative endeavors. RS involves consulting in the use of software tools and program coding directly related to projects or specific research, including consulting for computation, statistics, visualization, and GIS platforms in conjunction with software package installation and use; media conversion; and product evaluation.

A variety of computation facilities are provided in support of research and creative endeavors within the ASU community, ranging from individual workstations to SMP/MPP servers and mainframes. Extended computer capabilities are available through access to national computing centers. More information is available at www.asu.edu/it/fyi/research.

Research Support (RS) Lab. The Research Support Lab seeks to establish partnerships with faculty, staff, and students to acquire, create, and enhance research and creative endeavors through the effective use of visualization and Geographic Information Systems (GIS) technologies.

The lab is located in CPCOM 235. Its staff assists researchers with hardware, software, and data to facilitate the creation of geographic information systems for spatial analysis, query, and display. The lab supports research from various disciplines and provides additional resources to students who are enrolled in GIS classes, serving as a focal point for GIS users to meet and share information and technical expertise.

Additionally, Visualization Services provides faculty, staff, and graduate students with the hardware and application software resources and services needed for the high-level graphics and visualization used in research. Researchers receive assistance ranging from interactive viewing of scientific data to visualization in the liberal and the performing arts and other endeavors. Visualization Services pro-

vides a focal point for developing technologies in software, hardware, and communications.

Further information on GIS and Visualization Services is available on the Internet at www.asu.edu/gislab and www.asu.edu/visualization, respectively.

ALUMNI ASSOCIATION

Founded in 1894, the Alumni Association is a volunteer-led organization committed to serve and unite alumni for the purpose of advancing the interests of ASU and its alumni. The association provides a variety of services for ASU alumni as well as a series of events scheduled around the country.

With more than 240,000 alumni living in the United States and throughout the world, the association plays an important role as the university's primary support organization. Comprising more than 50 groups, the campus, college, club, and chapter organizations (4Cs) of the association provide opportunities for all alumni to stay involved with the part of ASU that interests them most.

Members of the Board of Directors are elected each spring. See "ASU Alumni Association Board of Directors," page 431. For more information about the association or its board of directors, call 1-800-ALUMNUS or 480/965-ALUM.

LEARNING AND TEACHING EXCELLENCE

The Center for Learning and Teaching Excellence is dedicated to enhancing teaching and learning possibilities at ASU. To support this mission, the center provides a variety of training, support, and professional development programs for faculty, academic professionals, graduate students who have teaching responsibilities, and academic departments throughout the university. Our resources and services specifically focus on advancing improvements in student learning, especially the manner in which teachers promote and foster that learning.

Some of the center's goals are

1. assisting faculty, programs, and departments to assess and develop instructional approaches;
2. providing workshops designed to enhance specific instructional practices for all who teach;
3. serving as a clearinghouse of information about activities, events, resources, and projects that may enhance teaching and learning;
4. developing synergistic relationships with existing campus units;
5. providing instructional assistance to new faculty on campus;
6. encouraging reflective use of instructional technologies; and
7. collaborating with other campus units to secure grant moneys for new course development, exploration of innovative teaching methods, and/or research in effective instruction.

For more information, call 480/965-9401.

LEARNING AND TEACHING EXCELLENCE (LTE)

LTE 598 Special Topics. (1–4)

selected semesters

Topics may include the following:

- Diversity in the Classroom: Prospects and Challenges. (1)
- Improving Teaching Through Assessment. (1)
- Strategies for Effective Lecturing. (1)
- Strategies for Promoting Active Learning. (1)
- Teaching with Technology. (1)
- Teaching with Writing. (1)

Omnibus Courses. For an explanation of courses offered but not specifically listed in this catalog, see "Omnibus Courses," page 48.

RESEARCH CENTERS, INSTITUTES, AND LABORATORIES

These units serve the university's mission in research. They are overseen by eight of the colleges, the vice provost for Research, and the ASU East provost.

Center for Research on Education in Science, Mathematics, Engineering, and Technology. The Center for Research on Education in Science, Mathematics, Engineering, and Technology (CRESMET), an alliance of the ASU Colleges of Education, Engineering and Applied Sciences, and Liberal Arts and Sciences, was initiated in 1999, growing out of what was previously the Center for Innovation in Engineering Education. The mission of the center is to bring together individuals, programs, and organizations interested in improving K–20 science, mathematics, engineering, and technology education to research, develop, and assess educational theories, curricula, courses, and administrative policies that impact science, mathematics, engineering, and technology education. The center also encourages and supports wide-scale sharing and implementation of effective approaches to producing a more scientifically and technologically literate populace and more capable science, mathematics, engineering, and technology majors.

Research. CRESMET pursues research and development that demonstrates coherent, consistent, and conceptually powerful mathematics, science, engineering, and technology education from kindergarten through college (K–20).

Partnering. CRESMET supports collaborations across the traditional boundaries of university, community, business, and local education agencies.

Sharing. CRESMET establishes communication avenues for intellectual and material products proven effective in supporting powerful learning in science, mathematics, engineering, and technology fields.

For more information, visit CRESMET in ECG 303, call 480/965-5350, or access the CRESMET Web site at www.eas.asu.edu/~cresmet.

College of Architecture and Environmental Design

Herberger Center for Design Excellence. The Herberger Center for Design Excellence is the research, outreach, and publication arm of the College of Architecture and Environmental Design. The center facilitates and promotes research, scholarship, and creative activity among the faculty and students of the college in the fields of architecture, interior design, industrial design, graphic design, landscape architecture and urban design, and environmental planning.

In keeping with its outreach mission, the Herberger Center also publishes reports, newsletters, and books that help to inform debate on key design and planning issues in the desert southwest. The center works closely with the faculty to publish books, working papers, and conference proceedings that promote scholarship in the planning and design disciplines.

The Joint Urban Design Program (JUDP), based in downtown Phoenix, is the center's outreach arm. It facilitates interaction among college faculty, students, and the broader community, and offers design as a way to further dialogue and to address urban issues. The JUDP conducts intensive workshops, (community-based charrettes) that help neighborhoods, groups, and other city stakeholders focus on concerns and strategies to respond to critical needs. Student groups and faculty work with the JUDP to identify real world problems that they address in studio projects. For more information, call 480/727-5146, or access the JUDP Web site at www.asu.edu/caed.

College of Business

Arizona Real Estate Center. The Arizona Real Estate Center (AREC), established in 1980, serves a multifunction research and educational role to foster better understanding of the real estate sector of the Arizona economy. Housing, commercial real estate, and construction activity data for Arizona and Maricopa County are collected by the center and are utilized for a variety of ongoing projects, including the calculation of affordability indexes and the computation of housing appreciation figures for the metropolitan Phoenix area. The center's annual outlook series provides a public forum for prominent members of the real estate industry to present their perceptions of market conditions.

For more information, call 480/965-5440, access the AREC Web site at www.cob.asu.edu/seid/arec, or write

ARIZONA REAL ESTATE CENTER
PO BOX 874011
TEMPE AZ 85287-4011

Bank One Economic Outlook Center. The Bank One Economic Outlook Center (EOC), established in 1985, specializes in economic forecasts of Arizona and the Western states. The center publishes the *Bank One Arizona Blue Chip Economic Forecast* (monthly), *Greater Phoenix Blue Chip Economic Forecast* (quarterly), *Western Blue Chip Economic Forecast* (10 issues per year), and *Blue Chip Job Growth Update* (monthly), an update of current job growth in the United States. The center also publishes *Mexico Consensus Economic Forecast* (quarterly), a forecast and historical data on the Mexican economy.

For more information, call 480/965-5543, access the EOC Web site at www.cob.asu.edu/seid/eoc, or write

BANK ONE ECONOMIC OUTLOOK CENTER
PO BOX 874011
TEMPE AZ 85287-4011

Center for the Advancement of Small Business. The Center for the Advancement of Small Business (CASB) is a 21st-century leader in business education, practice, and research providing high-quality, relevant programs, and

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information services focused on small business since 1994. The center enables students and existing small and medium-size businesses to participate, contribute, and compete in the global economy.

The center provides students from all disciplines with programs and resources that prepare them for positions of leadership in small and medium-size businesses, and aids small and medium-size businesses in the continuous improvement of their human resources and business practices. CASB also engages in applied research on entrepreneurship and the emerging changes and trends in small business.

For more information, visit CASB in BAC 111, call 480/965-3962, access the CASB Web site at www.cob.asu.edu/seid/casb, or write

CENTER FOR THE ADVANCEMENT
OF SMALL BUSINESS
PO BOX 874406
TEMPE, AZ 85287-4406

CAPS Research. CAPS (Center for Advanced Purchasing Studies) Research was established in November 1986 by a national affiliation agreement between the ASU College of Business and the Institute for Supply Management. It is the first and only program of its kind in the nation and is located in the Arizona State University Research Park, about eight miles south of the ASU Main campus. CAPS Research conducts in-depth research into the problems facing the purchasing profession today and, through its studies, seeks to improve purchasing effectiveness and efficiency and the overall state of purchasing readiness.

For more information, call 480/752-2277, access the Web site at www.capsresearch.org, or write

CAPS RESEARCH
ASU RESEARCH PARK
2055 E CENTENNIAL CIRCLE
PO BOX 22160
TEMPE AZ 85285-2160

Center for Business Research. The Center for Business Research (CBR) has been a consistent source of information on the Arizona and metropolitan Phoenix economies since 1951. Both the business community and the public have had access to the economic indicators produced by the ongoing projects of the center, including quarterly net migration estimates for Arizona and Maricopa County. CBR also conducts projects under the sponsorship of private and public agencies. Recent examples include the economic impact of Super Bowl XXX, a study of seasonal migration to Arizona, and an analysis of the state's hospital industry. A monthly publication of the center, *AZB/Arizona Business*, plays a major role in disseminating to the public the economic information compiled by the research centers of the Seidman Institute. The staff within the center is available to respond to inquiries and to provide available data.

For more information, call 480/965-3961, access the CBR Web site at www.cob.asu.edu/seid/cbr, or write

CENTER FOR BUSINESS RESEARCH
PO BOX 874011
TEMPE AZ 85287-4011

Center for Services Leadership. Since 1985 the Center for Services Leadership (CSL) has been a leading university-based hub devoted to the study of services marketing and management. The CSL addresses how any company can improve internal service processes and use service and customer satisfaction as a competitive advantage. The center encourages firms to share the best ideas and practices for adaptation across industries. Though grounded in marketing, the center's work is cross-functional, integrating concepts and techniques from marketing, operations, human resources, and management.

The center's areas of expertise include customer retention and loyalty; service quality; service delivery; professional services such as healthcare, accounting, and consulting; customer satisfaction; services strategy; service culture; and service recovery. A leader in the business and academic communities, the Center for Services Leadership work advances the knowledge base in the field and provides applicable frameworks, concepts, and tools.

The center offers its partner firms topflight executive education in services through the annual "Activating Your Firm's Service Culture" symposium, the annual "Services Marketing and Management" institute program, and the annual "Information Technology Services Marketing" course and provides customized executive education programs and research projects tailored to and conducted for charter member firms.

The center also actively supports the College of Business M.B.A. program that offers a specialization in Services Marketing and Management. This specialization infuses strong company-based experience and encourages summer internships.

For more information, visit the CSL in BAC 440, call 480/965-6201, or write

CENTER FOR SERVICES LEADERSHIP
PO BOX 874106
TEMPE, AZ 85287-4106

L. William Seidman Research Institute. The mission of the L. William Seidman Research Institute is to encourage and support applied business research by serving as a public access point to the College of Business. Specific goals include transferring new knowledge to the public; supporting faculty and student research; encouraging the development of educational programs grounded in business research; and conducting high-quality, applied business research.

The institute encourages research activity by providing research support services to the faculty, staff, and students of the college. These services include facilitating grant preparation and assistance in grant administration. The institute's research centers act as the focal point for involving faculty and students in applied research on important issues identified by the business community.

The institute also serves an important role in the broader educational mission of the College of Business by disseminating the findings of research conducted by the faculty, students, and research center staff, as well as the results of business research from other sources around the world. This is accomplished through a variety of mechanisms: newsletters and research reports; seminars and conferences; Inter-

net Web pages; media interviews and press releases; and by responding to inquiries from businesses, public officials, and the community. For more information, call 480/965-5362, access the institute's Web site at www.cob.asu.edu/seid, or write

L. WILLIAM SEIDMAN RESEARCH INSTITUTE
PO BOX 874011
TEMPE AZ 85287-4011

Institute for Manufacturing Enterprise Systems. See "Institute for Manufacturing Enterprise Systems," page 34, for information on this joint venture of the College of Business and the College of Engineering and Applied Sciences.

College of Education

Center for Indian Education. The Center for Indian Education is an interdisciplinary research and service center established in 1959. It promotes studies in American Indian policy and administration that contribute to scholarship and effective practices in education, professional training, and tribal capacity building. It is structured to foster relations between the university and sovereign tribes and to provide training and technical assistance for community programs. The center publishes the *Journal of American Indian Education* and sponsors workshops and colloquia that bring together scholars and tribal community leaders.

The center provides leadership through a group of American Indian faculty and is organized on the basis of scholarly expertise of the faculty. In addition to College of Education faculty, responsibilities are shared by faculty from the School of Social Work, the School of Justice Studies, the College of Liberal Arts and Sciences, and the College of Law. Areas currently studied include administrative leadership, policy analysis, bilingual education, health and welfare policy, justice studies, and program development in professional studies.

For more information, visit the center in ED 402, call 480/965-6292, or access the center's Web site at coe.asu.edu/cie.

CRESMET. See "Center for Research on Education in Science, Mathematics, Engineering, and Technology," page 31.

Education Policy Studies Laboratory. Located within the College of Education, the Education Policy Studies Laboratory (EPSL) conducts and coordinates original research in areas such as student performance standards, assessment, curriculum, and commercialism in schools. EPSL not only disseminates its analyses and reports to policy makers and educators, but concentrates on providing the public with readable accounts of research.

The EPSL houses two research units—the Commercialism in Education Research Unit (CERU), which is the only national academic research center dedicated to schoolhouse commercialism, and the Education Policy Research Unit (EPRU), which conducts original research and facilitates implementation of educational innovations.

For more information, contact Alex Molnar, director and professor of Educational Leadership and Policy Studies, EDB L1-01, 480/965-1886, or access the laboratory's Web site at www.asu.edu/educ/epsl.

Southwest Center for Education Equity and Language Diversity. The Southwest Center for Education Equity and Language Diversity conducts, supports, and promotes research, scholarship, and innovative practice in language education designed for minority students in public schools. The center gives priority to scholarship and field-based work relating to educational equity and the systematic usage of heritage languages and cultures. The aim is to integrate these resources into the educational experience of all children and youth.

The center's scope of work is driven by a need to merge several related topics into a single articulated conversation: biliteracy; promoting the role of public education to strengthen communities; and enabling binational collaboration among educators. The long-term vision is to help develop a new pedagogy tailored to the needs of the bicultural region the center serves. The integration of these themes shapes the scope of work for the center in the following areas:

1. Within the broad scope of educational policy research, the center focuses on scholarly inquiry that contributes to informed and enlightened discourse on language policy for schools and society, especially on the harmonious coexistence of English, the national language, and Spanish, the second most used language in our society.
2. Life in the American Southwest is bicultural and increasingly binational. In this Pan-American context, bilingualism will gain in importance. Equally important will be the collective ability of residents on both sides of the border to work harmoniously in pursuit of a common destiny that will be ever more intertwined. Schools must help children and youth develop skills and predispositions to face this challenge.
3. Mexico and the United States are becoming more interdependent. In this context, Mexican educators should have opportunities to contribute to improving education for Mexican immigrant children in U.S. schools. To enable this, schools must create pilot projects and an infrastructure for collaboration among institutions and individuals on both sides of the U.S.-Mexico border.

For more information, visit the Southwest Center for Education Equity and Language Diversity in ED 440, call 480/965-7134, or access the center's Web site at www.asu.edu/educ/sceed.

College of Engineering and Applied Sciences

Center for Low-Power Electronics. The Center for Low-Power Electronics (CLPE) is a collaborative effort of the University of Arizona and ASU to address fundamental, industry-relevant research problems in the design of ultra-low power microelectronic systems. The CLPE is formed under the State/Industry/University Cooperative Research initiative of the National Science Foundation (NSF). The NSF and the State of Arizona recognize that Arizona has the key ingredients to become a leader in this technology. It has

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the world's leading companies involved in the manufacture of portable computing and communication systems. The technical areas of focus of the Center for Low-Power Electronics include

1. basic materials, alternative materials, and their fabrication;
2. device design optimization;
3. design of digital, analog, and hybrid low-power circuits; and
4. power-based physical design for single- and multi-chip VLSI systems.

For more information, visit the center in ENGR 115, or call 480/965-8654.

Center for Solid State Electronics Research. The Center for Solid State Electronics Research (CSSER) focuses on research in the areas of epitaxial semiconductor crystal growth, device characterization and modeling, defect behavior in semiconductors material characterization, environmentally benign and other novel processing, fine line lithography, surface analysis, and transport. Major programs address semiconductor device modeling, transport theory, optoelectronics, ferroelectrics, semiconductor processing, microwave devices, and ultra-submicron and nano-structured devices. New thrust areas include molecular electronics and MEMS.

For more information, visit CSSER in ENGR 115, call 480/965-3708, or access [the CSSER Web site at ceaspub.eas.asu.edu/csser](http://ceaspub.eas.asu.edu/csser).

Center for System Science and Engineering Research. The Center for System Science and Engineering Research (SSERC) has established four focus areas: nonlinear dynamical systems, control theory and its applications, mathematical neuroscience, and scientific computing and interdisciplinary systems engineering. The center is jointly sponsored by the College of Engineering and Applied Sciences and the College of Liberal Arts and Sciences. Its main goals are the creation and enhancement of interdisciplinary and cooperative research, graduate education, and public service programs in the areas of systems science, applied mathematics, and computation.

For more information, visit the SSERC in GWC 606, call 480/965-8382, or access the SSERC Web site at www.eas.asu.edu/~sserc.

CRESMET. See "Center for Research on Education in Science, Mathematics, Engineering, and Technology," page 31.

Institute for Manufacturing Enterprise Systems. The Institute for Manufacturing Enterprise Systems (IMES) is a joint venture of the College of Business and the College of Engineering and Applied Sciences, established to enhance manufacturing research and industrial collaboration at the interface between the two colleges. IMES's mission is to establish ASU as an international leader in the creation and dissemination of new knowledge in the area of global manufacturing for the new economy. It particularly focuses on how manufacturing impacts Arizona. Research thrust areas include virtual manufacturing, enterprise systems, knowledge management, and software in the system solution.

For more information, visit the institute in GWC 402, or call 480/965-3709.

Telecommunications Research Center. Telecommunications play a vital role in home, commercial, entertainment, educational, scientific, and military systems. The Telecommunications Research Center focuses its interests and activities in research and educational programs. The approach is to conduct basic and applied research, develop technologies, and provide education programs in all major areas of telecommunications, from signal generation to reception. The targeted areas of excellence are antennas, propagation, and scattering; microwave circuits, devices, and measurements; optical communications; signal processing; broadband switching; and wireless communication systems. Ultramodern laboratories and computational facilities are associated with the center.

For more information, visit the center in GWC 411, call 480/965-5311, or access the center's Web site at trc.eas.asu.edu.

College of Law

Center for the Study of Law, Science, and Technology. Located in the College of Law, the Center for the Study of Law, Science, and Technology conducts research, edits *Jurimetrics: The Journal of Law, Science and Technology* in cooperation with the American Bar Association Section on Science and Technology, and sponsors seminars, workshops, and conferences. Through these activities, the center seeks to contribute to the formulation and improvement of law and public policy affecting science and technology and to the wise application of science and technology in the legal system. Current areas of research include communications and telecommunications law, computer-related law, forensic science and statistics, legal issues and biotechnology, law and medicine, and law and social science.

For more information, visit the center in LAW 201, or call 480/965-2124.

College of Liberal Arts and Sciences

Arizona Center for Medieval and Renaissance Studies (ACMRS). The Arizona Center for Medieval and Renaissance Studies is a research unit serving affiliate scholars from ASU, Northern Arizona University, and the University of Arizona. It represents a variety of disciplines, including history, literature, philosophy, religion, language, music, art, and science. ACMRS enriches academic offerings in medieval and renaissance studies by sponsoring one or two visiting professors each year. Graduate research assistantships are also available through the center.

Significant opportunities for the study of the Middle Ages and the Renaissance exist at ASU. Hayden Library has an extensive microfilm collection and many rare books in medieval and renaissance studies. ACMRS also sponsors a lecture series each semester covering a variety of topics.

Other programs include an annual conference, a public symposium, a summer study abroad program at the University of Cambridge (United Kingdom), and student exchange programs with the University of Copenhagen (Denmark) and the University of Kalmar (Sweden).

Since 1996, ACMRS has published Medieval and Renaissance Texts and Studies (MRTS), a major series of editions, translations, and reference works. In collaboration with the University of Massachusetts at Dartmouth and the University of Kansas, ACMRS sponsors and coedits *Mediterranean Studies*, an annual interdisciplinary journal publishing articles on all aspects of the Mediterranean region. ACMRS also sponsors a book series titled *Arizona Studies in the Middle Ages and the Renaissance*, published by Brepols (Belgium).

ACMRS also partners with the Renaissance Society of America and the University of Toronto in *Iter*, a massive, retrospective, online medieval and renaissance bibliography covering all languages and disciplines, and is the official site of the Medieval Academy of America's online data project offering information on medieval centers, programs, committees, and regional associations in North America.

For more information, visit ACMRS in SS 224, call 480/965-5900, or access the ACMRS Web site at www.asu.edu/clas/acmrs.

Cancer Research Institute. Significant advances in the treatment of human cancer and other serious medical problems depend upon scientists well trained in organic chemistry, biochemistry, and biology. The Cancer Research Institute provides graduate students with the specialized training necessary for research in the discovery and development of effective anticancer drugs. Among various activities, laboratory personnel are pursuing a unique program concerned with isolation, structural identification, and synthesis of naturally occurring anticancer agents from marine animals, plants, and marine microorganisms.

For more information, visit the institute in CRI 209, or call 480/965-3351.

Center for Asian Studies. Through its East Asian and Southeast Asian studies programs, the Center for Asian Studies serves as research coordinator for Asian studies' faculty and graduate students in a variety of disciplines. The center sponsors colloquia and research conferences. It also publishes two scholarly *Monograph Series* and a newsletter on Southeast Asian studies, *Suvannabhumi*, which have an international readership. Graduate students may apply for research assistantships in the center and its program.

The center works with the office of International Programs to administer student exchange programs with a number of universities in Asia. The center also sponsors an Asian film series each semester. A reading room is located in the center office suite offering a variety of Asian and English language publications and newspapers from and about Asia.

For more information, visit the center in WHALL 105, or call 480/965-7184.

Center for Meteorite Studies. The nation's largest university collection of extraterrestrial materials is available for research in the Center for Meteorite Studies. Teaching and research on meteorites, meteorite craters, and related areas of space and planetary science are accomplished through the regular academic units in cooperation with the center.

For more information, visit the center in PS C151, or call 480/965-6511.

Center for Solid State Science. The Center for Solid State Science is a research unit within the College of Liberal Arts and Sciences.

The membership comprises faculty and academic professional researchers and research support personnel, most of whom hold simultaneous appointments in affiliated academic units. The Center for Solid State Science is the ASU focal point for interdisciplinary research on the properties and structure of condensed phases of matter at the interfaces between solid-state chemistry and physics, earth and planetary science, and materials science and engineering. It also supports interdisciplinary approaches to science and engineering educational outreach activities.

The center provides an administrative home for large, multidisciplinary, block-funded research projects. These include the NSF-supported Materials Research Science and Engineering Center (MRSEC) and the Interactive Nano-Visualization for Science and Engineering Education (IN-VSEE) project. To support these activities, members of the center operate modern and sophisticated research facilities and organize regular research colloquia and symposia.

Principal topical areas of research in the center include studies of structure and reactivity of surfaces and interfaces, electronic materials, advanced ceramics and glasses, synthesis of new materials, high-pressure research, development of techniques in high-resolution electron microscopy and micro-structural and chemical analysis, development of visualization techniques at different scales of magnification for science education and community outreach.

The research facilities of the center include the Center for High Resolution Electron Microscopy (CHREM) and the Goldwater Materials Science Laboratories (GMSL).

CHREM. The center operates several ultra high-resolution and ultra high-vacuum electron microscopes and supports microscopy methods and instrumentation development, including holography, position- and time-resolved nano-spectroscopy, and energy-filtered imaging and diffraction. The center provides high-resolution capability for a large external group from other universities and industry.

GMSL. These facilities include

1. the Materials Facility (MF), which provides a wide range of synthesis and processing capabilities for preparation of specimen materials. MF also provides thermal analysis for study of solid-state reactions and Auger and X-ray photoelectron spectroscopy for analysis of surface compositions and electronic structure of surfaces;
2. the Materials Science Electron Microscopy Laboratory (MSEML), which provides state-of-the-art electron microscopes for analysis of microstructures, including imaging and diffraction, and high spatial resolution chemical analysis using energy dispersive X-ray and electron energy loss micro-spectroscopy;
3. the Ion Beam Analysis of Materials (IBeAM) facility, which provides compositional and structural determination of the surface and near-surface regions (0–2mm) of solids by ion beam analysis where elemental composition and depth distribution information are needed. Channeling experiments are

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- used to determine crystal perfection and site occupancy;
4. the Secondary Ion Mass Spectrometry (SIMS) laboratory, which provides depth profile and point composition analysis with very high chemical sensitivity, on the order of one part per billion, including isotopic analysis for many materials. SIMS is also used as a chemical microscope, to image elemental distributions on specimen surfaces;
 5. the Scanning Probe Microscopy Laboratory (SPM), which provides facilities for nanoscale viewing of solid surfaces using scanning tunneling microscopy (STM), atomic force microscopy (AFM), and related techniques. The SPM laboratory serves as a focus for undergraduate research training programs and educational and outreach activities;
 6. the Facility for High Pressure Research, which provides facilities for synthesis of new materials and for geochemistry/geophysics studies at up to 25 Gpa (250,000 atmospheres) and temperatures greater than 2000° C. These facilities are complemented by diamond anvil cells capable of in situ studies at up to one million atmospheres. This laboratory provides a focus for core research projects within the MRSEC;
 7. the Goldwater Materials Visualization Facility (GMVF), which consists of a battery of linked workstations for remote operation of instruments and data collection, capture of images in real time, and advanced computing and simulation of materials. The GMVF is used in research and in undergraduate and graduate education, as well as in educational and community outreach; and
 8. other specialized laboratories under development, which include high-resolution X-ray diffraction for thin film characterization, optical spectroscopy, and nuclear magnetic resonance spectroscopy for solid-state studies and research on materials under extreme conditions.

These facilities provide the primary teaching and research resources used by students in the Science and Engineering of Materials interdisciplinary Ph.D. program and the undergraduate option for Materials Synthesis and Processing. They are also used extensively by students in disciplinary programs from affiliated departments.

For more information, visit the center in PS A213, call 480/965-4544, or access the Web site at www.asu.edu/clas/csss.

Center for the Study of Early Events in Photosynthesis. The ASU Center for the Study of Early Events in Photosynthesis was established in 1988 as part of a joint grant program of the Department of Energy, the National Science Foundation, and the Department of Agriculture. In 1990, it was designated a Regents Center of the University. Since September of 1995, it has been funded by the Office of the Vice Provost for Research and the College of Liberal Arts and Sciences. The center consists of about 90 students, postdoctoral associates, and research scientists led by 15 faculty members in the Department of Chemistry and Biochemistry and the Department of Plant Biology. These research groups

share a common goal: understanding the process of photosynthesis, which is responsible for producing all of our food and filling the vast majority of our energy and fiber needs. The impetus for development of the center was the premise that photosynthesis is a complex problem that will only yield to an investigation using a wide variety of approaches and techniques. Thus, the center serves as an infrastructure supporting individual ASU scientists and fostering multidisciplinary cooperative research projects.

The ultimate objective of the research is the elucidation of the basic principles governing the biochemical and biophysical processes of photosynthetic energy storage. This goal is being realized via investigation of the early events of photosynthesis, including: light absorption and excitation transfer in photosynthetic antennas; the mechanism of primary photochemistry in plant and bacterial systems; secondary electron transfer processes; structure and assembly of photosynthetic antennas, reaction centers, and electron transfer proteins; pigment-protein interactions; artificial and biomimetic photosynthetic solar energy conversion systems; and mechanisms of biological electron transfer reactions.

The center is equipped with state-of-the-art instrumentation that allows students to do frontier research in a broad range of disciplines. Equipment includes a variety of pulsed lasers for measurements with time resolution ranging from sub-picoseconds to seconds, a 500 MHz NMR instrument, an EPR spectrometer, a protein X-ray facility, spectrophotometers, fluorometers, a protein sequencer, and an amino acid analyzer.

The center sponsors a weekly Photosynthesis Seminar Series and brings in visiting scientists from around the world to carry out collaborative research. Undergraduate, graduate, and postdoctoral training programs in the Department of Chemistry and Biochemistry and the Department of Plant Biology are central components of the activities of the center.

For more information, visit the center in PS D207, or call 480/965-1963.

CRESMET. See “Center for Research on Education in Science, Mathematics, Engineering, and Technology,” page 31.

Exercise and Sport Research Institute. The Exercise and Sport Research Institute (ESRI) is an interdisciplinary research unit located in the Department of Exercise Science and Physical Education and serves, in part, as a research facility for the interdisciplinary doctoral program in exercise science. Faculty and graduate students within ESRI investigate a wide range of topics concerning physical activity, including different age cohorts, levels of health, levels of ability and fitness, levels and types of training, and physical and emotional stresses, nutrition, and genetic backgrounds. Where applicable, these aspects are studied using an interdisciplinary approach. ESRI is affiliated with a number of clinical and research institutions in the Phoenix area.

ESRI houses numerous specialized research laboratories. *Biomechanics* applies the laws of mechanics to the study of human movement. Current research examines kinematic and kinetic determinants of locomotion patterns in walking, running, cycling, and swimming; neuromusculoskeletal modeling and computer simulation of locomotion in clinical and sport applications; ergonomics; and mechanisms under-

lying upper extremity repetitive strain injuries. *Exercise physiology* is the study of physiologic systems (cardiovascular, respiratory, muscular, endocrine, metabolic) under conditions of stress, particularly exercise stress. Both acute exercise responses and chronic adaptations resulting from exercise training are considered in relation to health and performance and are investigated in several specialized labs. The *Exercise Biochemistry Lab* examines subcellular systems involved in the provision and regulation of energy transfer during exercise. The *Exercise Endocrinology Lab* studies interrelationships of exercise and training with stress, hormones, neurotransmitters, and the immune system. Research conducted in the *Applied Exercise Physiology Lab* is aimed at better understanding how physical activity and exercise influence the health, fitness, and athletic performance of able-bodied and physically-challenged individuals. Research in the *Motor Control Lab* investigates how movement is regulated and controlled via the nervous system in normal and pathological populations. Special emphases include motor deficits attributed to basal ganglia dysfunction and upper extremity coordination, particularly finger and hand posture, in reaching and prehensile movements. *Motor development* studies how human movement is generated and evolves throughout the lifespan. Current research focuses on learning and development of bimanual coordination. Timing and coordination of perceptual-motor skills are measured in normal developing children, persons with Down syndrome, and adults to investigate cerebral asymmetries and specificity of learning. The *Sport and Exercise Psychology Lab* examines the relationship between psychological constructs and physical activity and the influence of participation in physical activity on psychological phenomena. Current research is designed to examine the influence of physical activity, fitness, and particular sport practices on psychophysiological mechanisms and cognitive functioning; the effect of psychological skills for performance enhancement; motivational aspects of physical activity across the lifespan; and the effects of exercise on mental health.

For more information, visit ESRI in PEBE 159, or call 480/965-7906.

Hispanic Research Center. The Hispanic Research Center (HRC) at ASU is an interdisciplinary unit, dedicated to research and creative activities, that is university-wide but administered through the College of Liberal Arts and Sciences. The HRC performs basic and applied research on a broad range of topics related to Hispanic populations, disseminates research findings to the academic community and the public, engages in creative activities and makes them available generally, and provides public service in areas of importance to Hispanics.

Faculty, staff, and advanced graduate students organize into working groups to develop a broad range of specific projects and lines of inquiry within the general categories of Hispanic entrepreneurship, science and technology, information and data compilation and dissemination, the Hispanic polity, and the arts. Ongoing activities of the HRC, primarily funded by external grants, include the Arizona Hispanic Business Survey, the *Bilingual Review Press*, the Community Art and Research Outreach (CARO), Chicano

and Chicano Space: Art Education Web site, Digital Divide Solutions Project, Project 1000, and the Western Alliance to Expand Student Opportunities.

CARO sponsors creative activities and research in collaboration with community-based organizations and ASU faculty.

For more information, visit the HRC in CFS 104, call 480/965-3990, or access the HRC Web site at www.asu.edu/clas/hrc.

Institute of Human Origins. The Institute of Human Origins (IHO), founded in 1981 by Donald Johanson, became part of the College of Liberal Arts and Sciences in 1997. IHO is a multidisciplinary research organization dedicated to the recovery and analysis of the fossil evidence for human evolution and the establishment of a chronological framework for human evolutionary events. IHO's scientists carry out field research at sites in Africa, the Middle East, and Asia. IHO houses the largest collection of *Australopithecus afarensis* casts (including "Lucy," a 3.2 million-year-old human ancestor) in the world as well as an extensive collection of other fossil hominid casts. IHO's library contains more than 3,000 volumes, numerous journals, videotapes, audiotapes, and slides related to human evolution and fossil sites. IHO produces periodic newsletters, offers lecture series, conducts tours and workshops, and supports numerous informal science education outreach projects.

For more information, visit IHO in SS 103, call 480/727-6580, or access the IHO Web site at www.asu.edu/clas/iho.

Joan and David Lincoln Center for Applied Ethics. The Joan and David Lincoln Center for Applied Ethics (LCAE) is a university-wide center for applied ethics that is administratively housed in the College of Liberal Arts and Sciences. Its mission is

1. to develop and coordinate a strong focus on theoretical and applied ethics across intellectual disciplines and professional programs within the university,
2. to support teaching and creative research in ethics, and
3. to foster collaboration between the university and its varied publics to address major ethical challenges facing contemporary society.

For more information, visit LCAE in AG 355, call 480/727-7691, or access the Web site at www.asu.edu/clas/lincolncenter.

Latin American Studies Center. Arizona maintains an ever-growing interest in Latin America that draws upon an extensive experience of historical and geographical ties. The Latin American Studies Center is the focal point for these interests at ASU. Through its program, the center serves the university community and maintains strong ties with various Latin American organizations in the state and the nation. Principal activities are coordinating Latin American studies at the undergraduate and graduate levels; sponsoring student exchange programs; organizing events featuring Latin American arts and culture, numerous seminars, and research conferences; publishing a wide range of

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professional materials; and undertaking and facilitating research about the region.

The center administers student exchange programs with the Catholic University of Bolivia and three Mexican universities—the Autonomous University of Guadalajara, the Autonomous University of Nuevo Leon, and the University of Sonora. Each spring several ASU students are selected to attend courses at the Latin American universities while Bolivian and Mexican students attend ASU. The center also has an exchange agreement with the Pontific Catholic University of Ecuador for faculty and students as well as summer programs in Quito, Ecuador, and Ensenada, Mexico.

The center is a member of the American Modern Language Association, Consortium of U.S. Research Programs for Mexico, Consortium for Latin American Studies Association, Pacific Coast Council on Latin American Studies, Rocky Mountain Council for Latin American Studies, Consortium of Latin American Studies Programs, and Conference on Latin American History.

The center directly encourages research, not only through its research conferences, but also through close coordination with the Latin American collection of Hayden Library and networking with Latin American universities.

For more information, visit the center in SS 213, or call 480/965-5127.

College of Public Programs

Center for Nonprofit Leadership and Management. The Center for Nonprofit Leadership and Management (CNLM) promotes the understanding and improved practice of nonprofit organizations. The center coordinates a nonprofit sector research program, facilitates educational offerings in nonprofit studies, serves as a convener on topical issues, and provides selected technical assistance and information services. The center facilitates relationships among students, faculty, and community organizations across a range of research and outreach activities. In addition, the center convenes leaders and managers from the nonprofit, business, and government sectors on topical issues pertinent to building nonprofit capacity in the region. The center supports the activities of three complementary nonprofit leadership and management education programs: the ASU American Humanics Program (undergraduate certificate), a postbaccalaureate program (graduate certificate), and a noncredit program (extended education certificate). For more information, call 480/965-0607, or access the Web site at www.asu.edu/copp/nonprofit.

Center for Urban Inquiry. The Center for Urban Inquiry focuses on civic involvement. The center's mission is to examine the unique features of the new urban West in the United States, particularly intersections of growth and development with citizen activism and community building. By harnessing the unique resources of the university, the center engages in partnerships with urban citizens, including youths, to increase awareness, promote inclusion, and address needs. Center programs include seed grants to students working in teams in pursuit of urban research and community service; service learning that involves students in community building; technical assistance to neighborhood organizations, schools, and hospitals; and the produc-

tion of works that appeal broadly to urban audiences, including performances, exhibits, and videos. For more information, call 480/965-9216, or access the center's Web site at www.asu.edu/copp/urban.

Morrison Institute for Public Policy. Established in 1981 by the Morrison family of Gilbert, Arizona, as a unit within the School of Public Affairs, the institute conducts research on public policy matters, informs policy makers and the public about issues of importance, and advises leaders on choices and actions. Morrison Institute offers a variety of services to public and private sector clients and pursues its own research agenda. Services include policy research, program evaluation, and public outreach. The institute's interests, research, and publications span such areas as education, urban growth, human services, workforce development, economic development, and arts and culture.

For more information, call 480/965-4525, access the institute's Web site at www.asu.edu/copp/morrison, or write

MORRISON INSTITUTE FOR PUBLIC POLICY
ARIZONA STATE UNIVERSITY
PO BOX 874405
TEMPE AZ 85287-4405

Herberger College of Fine Arts

Ceramics Research Center. The Ceramics Research Center was established in 2002 as part of the ASU Art Museum. For more information, call 480/965-2787, or access the museum's Web site at asuartmuseum.asu.edu.

Institute for Studies in the Arts. The Institute for Studies in the Arts (ISA) in the Herberger College of Fine Arts serves as a research laboratory for the development of new art forms, new ideas and concepts, and innovative technologies for artistic expression; a network for communication among creative scholars both within and outside the arts; and a resource base for the documentation, evaluation, and dissemination of research in the arts. ISA addresses the needs of a variety of populations through technical and monetary support and sponsorship for research projects, performances, exhibitions, and symposia.

ISA facilities include an experimental media performance space with an adjacent technology prototyping and applications studio in Drama City; the "Intelligent Stage," an interactive and tele-performance studio with state-of-the-art digital audio and video production and post-production facilities in Matthews Center; a Technology Development Studio for the development of prototype technologies and their application to aesthetic research; and comprehensive archives that document the history of research initiatives supported by the ISA.

ISA is open to a wide range of proposals from faculty, graduate and undergraduate students, and visiting artists, provided such proposals address the ISA mission of experimentation and innovation in the arts. For more information, visit ISA in MCENT 224, call 480/965-9438, or access the ISA Web site at herbergercollege.asu.edu/isa.

Vice Provost for Research

Center for Environmental Studies. Established in 1974, the primary mission of the Center for Environmental Studies is to facilitate collaborations among faculty researchers and to aid decision making about environmental issues. Through its collaborations, both with ASU faculty and partners from government, business, and the educational community, the center advances the identification of key local and global environmental issues and collects reliable information to be used by scholars, policy makers, and the general public. For more information, access the CES Web site at www.asu.edu/ces.

The center is also home to the Central Arizona–Phoenix Long-Term Ecological Research (CAP LTER) project, one of only two urban sites in the NSF-funded LTER network. The CAP LTER project focuses on an arid-land ecosystem profoundly influenced, even defined, by the presence and activities of humans, and involves more than 50 associated faculty from biology, ecology, engineering, geography, geology, sociology, urban planning, and anthropology. For more information, access the CAP LTER Web site at caplter.asu.edu.

The center administers an NSF-funded Integrative Graduate Education and Research Training (IGERT) grant to develop a multidisciplinary program in urban ecology. The program's research component engages students in wide-ranging and multidisciplinary investigations into the

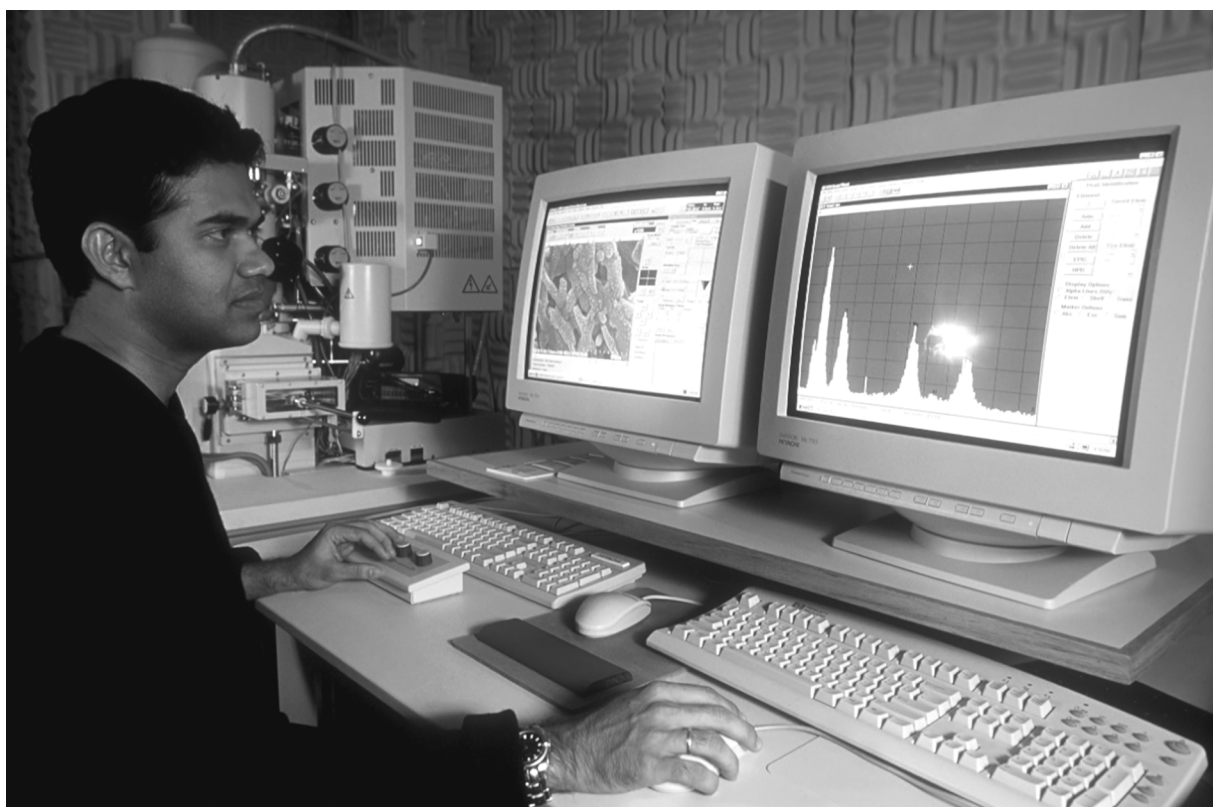
ecology of cities, with the CAP LTER project providing the research infrastructure. For more information, access the IGERT Web site at www.asu.edu/ces/igert.htm.

The center also facilitates applied environmental research projects undertaken by the Southwest Center for Environmental Research and Policy (SCERP), a consortium of five U.S. and four Mexican universities. SCERP develops a research agenda for the study of air and water quality, hazardous waste problems, environmental health issues, and growth management questions in the border region. For more information, access the Web site at www.scerp.org.

For more general information about the center, contact the director, Center for Environmental Studies, Tempe Center (located at the southeast corner of University and Mill), 480/965-2975, or access the center's Web site at www.asu.edu/ces.

ASU East

Sustainable Technologies, Agribusiness, and Resources Center. The focus of the Sustainable Technologies, Agribusiness, and Resources (STAR) Center is to bring together multidisciplinary researchers whose mission is to study sustainable processes and systems, whether natural or human designed, that will be efficient and less consumptive and will promote conservation of the earth. For more information, call 480/727-1240, or access the STAR Center Web site at www.east.asu.edu/research/star.



Prashant Majhi uses the Center for Solid State Electronics Research's high resolution scanning electron microscope for imaging work.

John Phillips photo