

TO: Don Coers
FROM: Grady Price Blount
DATE: October 31, 2007

re: endowed chairs

Per your memo dated 10/22/2007, I hereby submit the nominations and descriptions from the College of Sciences for endowed positions. In each of the following cases, I urged the faculty to consider the endowed chair requests as an indication of their own strategic direction and mission. As such, many of these requests are tightly aligned with my previous memo dated July 23, 2007 on Texas Tech collaborations. In addition, several of these proposed endowments would be tightly aligned with the ASU mission supporting Air University. I have added a notation to that effect next to the appropriate descriptions below.

Web of Knowledge Endowment (Campuswide and Air University)

Although not a faculty position, we feel that adding permanent access to the subscription-based *Web of Science* would profoundly affect scholarship at all levels. This service could be configured with the donor's name on the access homepage. The Web of Knowledge is a research tool which indexes citations, many with full text, both historically and with forward referencing. A simple demonstration of the product should be enough to convince any potential donor of the high-profile and critical nature of this tool to scholarship. Without question, this endowment would have the most *bang for the buck* of anything a donor could sponsor. Budget at the \$35K level (for annual renewals) with \$140K in start-up expenses.

Chair in Food Safety (Agriculture and Air University)

With the increasing incidence of food-borne pathogens entering the retail food distribution network, an increased emphasis on food safety and the requisite professional training is indicated. This position would provide leadership in our existing Meat Science program, provide operational oversight for the MIRC Meat Lab, and support the burgeoning student populations entering the field of food safety. Budget at the \$70K level.

Chair in Natural Resource Management (Agriculture and Air University)

The existing degree in Natural Resource Management has extremely high growth potential. This degree is also highly concordant with our new initiatives in international education. Urbanization pressures continue to increase throughout the world, and with them, the need to understand best practices for managing and preserving fresh water resources, rangeland, and agricultural production. Budget at the \$80K level.

Chair in Molecular and Developmental Biology (Biology)

This position would support our existing pre-med/pre-vet/pre-dent programs preparing students for careers in the health professions. In addition to teaching targeted courses a vigorous research program in this field would support student research opportunities. This position would also support research interests of students in biochemistry. As the cutting edge of the life sciences, molecular/developmental biologists are in great demand often require substantial start-up funds. Budget at \approx \$90K annually with startup costs of \approx \$500K.

Chair of Environmental Chemistry (Chemistry and Air University)

Environmental Chemistry is a rising star on the physical sciences. Environmental chemists typically use analytical instrumentation to address questions of ecological and environmental monitoring, detection and compliance. Chemistry faculty have conducted research in several related areas including analysis of Laguna Larga seawater samples via *atomic absorption spectroscopy*, *chemiluminescence* and *fourier transform infrared spectroscopy*. Other applications include research into the determination of amino acid and sugar content by *High Pressure Liquid Chromatography* in endangered plant species and identification of paleolipids from paleo-Indian rock mortars via *Gas Chromatography-Mass Spectrometry*. This position would also serve as a catalyst for increasing the number and depth of environmental chemistry offerings. Budget at the \$70K level with ≈\$400K in start-up lab funding and ≈\$50K in annual equipment maintenance costs.

Chair of Nutritional Biochemistry (Chemistry)

Nutritional Biochemistry explores nutrition and nutritional requirements for animal and human health by studying their function at the level of the cell. This is an applied branch of biochemistry with a critical role in disease prevention and treatment. With the aging of the U.S. population, this field will continue to grow for the foreseeable future. Nutritional Biochemistry- explores how nutrition and nutritional requirements are required for animal and human health by studying their function at the level of the cell This chair would have interactions with Agriculture, Molecular Biology, Nursing, and Physical Therapy. Budget at \$65K annually with \$50K in start-up funds.

Chair of Geographic Information Science (Computer Science and Air University)

Geographic Information Science (GIS) is one of a handful of disciplines currently on an exponential growth curve. professionals in these positions utilize computerized mapping technology combined with satellite imagery of the earth's surface to perform a multitude of tasks critical to an urbanized society. Land use, economic geography, urban planning, transportation, crop forecasting, rangeland management, and demographic studies are a few of the specialty areas in this discipline. ASU is currently well behind the curve in GIS – this position would provide regional leadership and would have many collaborative opportunities with the Texas Tech GIS research group. These personnel are in extreme demand. Budget at the \$135K level with a ≈\$250K in start-up lab investment.

Chair of Mathematics Education (Mathematics)

The burgeoning technical demands of modern society make a thorough understanding of mathematics essential for every citizen. Angelo State has a long tradition of excellence in undergraduate education combined with an extraordinary record of success in mathematics teacher preparation. An endowed professorship of Mathematics Education will allow ASU to significantly enhance preservice teacher preparation, inservice coordination with both novice and established teachers, and general mathematics instruction for West Texans. This position would also take a lead role in our STEM initiatives. Budget at the \$75K level annually.

Chair in Distance Education and Outreach (Nursing and Air University)

Building on the existing strengths of the Nursing program, this position supports and provides regional leadership for two of the key goals in the health care delivery system: *Transitioning* and *Mobility*, with particular attention to increasing the quantity and quality of caregivers capable of supporting the needs of West Texas. ASU has already established a reputation as hosting the most innovative Nursing program in the state. This endowed chair would build on those successes and continue to ensure our leadership in the health sciences. Budget at the \$100K level annually with an additional \$100K for initial start-up expenses.

Chair in Geriatric Rehabilitation (Physical Therapy)

The focus of this position is to bring in an internationally-known researcher with a focus on problems typical to the elderly. The focus of the research would be on improving balance and gait, while decreasing fall rates and severity. This individual would have a significant impact on the community since many of the strategies for elders with poor balance and gait are applicable to community based out-patient rehabilitation. This individual would work closely with Nursing and other allied health faculty to develop holistic approaches to improve health and function in the rapidly-expanding geriatric population in San Angelo and West Texas. Budget at \$120K annually with \$100K in start-up.

Planetarium Director (Physics)

An endowed professorship for planetarium director at Angelo State University should be reserved for a distinguished planetarium scholar and teacher. This endowment would provide funds to the A.S.U. planetarium director in support of his or her teaching, research, and service activities through the Department of Physics. In addition to the operational tasks of operating the planetarium, the director is actively involved in outreach, community involvement, STEM recruitment, teaching and research. Budget at the \$80K salary level annually with \approx \$25K in annual equipment maintenance funds.