Addendum-2 Brief History of Arkansas Academy of Science

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AAS Historian-As reported to the AAS business meeting for April 1st, 2016

From the Arkansas Academy's Home Page: History

The Arkansas Academy of Science began meeting in 1917 as a group of scientists wishing to establish regular avenues of communication with one another and promote science and the dissemination of scientific information in the state. Over the years since, the Academy has been led by scientists of notable accomplishment, such as Dwight Moore, Ruth Armstrong, C. E. Hoffman, Jewel Moore, Joe Nix, Ed Dale, to name a few. The Academy is a non-partisan, non-political, professional organization consisting of scientists who pay dues to join with other scientists to promote science in the state and region. The specific areas of science included (but not limited to) are Biomedical, Botany, Plant Science, Chemistry, Physics, Astronomy, Engineering, Geology, Environmental Science, Ecology, Invertebrate Zoology, and Vertebrate Zoology.

An Executive Committee, consisting of a President, Past-President, President-Elect, Vice President, Secretary, Treasurer, Journal Editors and Newsletter Editor convenes twice annually to discuss issues and determine some policy and procedures for maintaining and operating the Academy. The chairpersons of standing committees and the President of the Arkansas Science Teachers Association are invited to meet with the Executive Committee.

The Academy holds an annual meeting the second weekend in April during which business is transacted and reports/papers on research and teaching methods are given. The meeting provides many opportunities for colleagues to visit and share information about their respective work. Undergraduate and graduate students also participate and present their work at the Annual Meeting, and the Academy recognizes superior achievement by students with an active awards program.

The major publication of the Academy is the Journal of the Arkansas Academy of Science. The Journal for the previous year is released at the Annual Meeting. Through an exchange program, abstracting services and special subscriptions, the Journal is distributed to approximately 30 of our 50 states and 25 foreign countries.

The Academy also publishes an annual Newsletter, which contains general information about Executive Committee deliberations, the dates of the next annual meeting, programs, and research activities. Since created, the Academy has had 80 presidents and has published 69 volumes of its journal.

The following is from the 1941 volume of the Journal which can be readily accessed on line. EARLY HISTORY¹

The Arkansas Academy of Science

L. B. Ham

The Arkansas Academy of Science was organized at a meeting held at the Hotel Marion, January 11, 1917, in accordance with a call issued by Mr. Troy W. Lewis, an aggressive attorney² in Little Rock. The following people were present: Charles Brookover, histologist and erabryologist; Arthur R. Stover, analytical chemist; D. A. Rhinehart, anatomist; A. C. Shipp, pathologist and bacteriologist; Dewell Gann, Jr., surgical technician; Charles Oates, pharmacologist; and Morgan Smith, pediatrician—each being a member of the staff of theUniversity of Arkansas School of Medicine; Herbert A. Heagney, psychologist and W. H. Aretz, philosopher, — President and Dean of the Little Rock College, respectively; Troy W. Lewis, philologist and sociologist; and William F. Manglesdorf, analytical chemist in private practice at Little Rock.

Dr. Charles Brookover was called to the chair as temporary chairman. The first officers elected were as follows: President, Charles Brookover, Ph D.; Vice President, Morgan Smith, M.D.; Secretary, Dewell Gann, Jr., M.D.; Treasurer, Herbert A. Heagney, A.M., President Little Rock College; Permanent Secretary (5 years), Troy W. Lewis, A.M., D.C.L. The above were elected also as trustees as well as the following: William F. Manglesdorf, M.D.; Arthur R. Stover, A.M., M.D.; A.C. Shipp, A.M., M.D.; D. A. Rhlnehart, M.A., M.D.; Charles E. Oates, M.A., M.D.; and W. H. Aretz, S.T.D. The terms of these trustees were to expire, for the most part, two peryear beginning In1918.

The Arkansas general assembly (41st) was then in session. Mr. Lewis read a tentative bill for an Act to Create and Incorporate the Arkansas Academy of Sciences and, on motion, the tentative Act was adopted as the constitution of the body then assembled. The above proposed bill was rejected by the general assembly on its constitutionality, holding that Sec. of Art of the Constitution of 1874 would render such an act void if passed unless the Academy were willing that the state should exercise dominant control. Mr. Lewis took the point of view that the Academy should be free from any political connections and had rejected the state's right to exercise control. He, therefore, withdrew the bill and Incorporated the Academy by an act of the Pulaski Circuit Court. The Academy was incorporated under the name "Arkansas Academy of Sciences". The Academy accepted Mr. Lewis' report at an adjourned meeting, January 22, 1917.

The Academy membership was made up as follows: patrons, members, corresponding members, honorary fellows and fellows. All the above mentioned members were voted in at the organization meeting as fellows, officers and trustees of the Arkansas academy of Sciences. The Academy had, also a committee each, on the following: rules, auditing, finance, membership, research, and publications and lectures.

The Senate Chambers at the Old State House and the Administration building of the Little Rock College were to be used for the meeting purposes. These quarters were offered the Academy free. Dr. Heagney offered the use of the Little Rock College Laboratoriesfor research purposes, also; and Dr. Manglesdorf offered the use of his private laboratories for research purposes. Dr. Morgan Smith offered the Academy the use of the University of Arkansas MedicalSchool laboratories and buildings for research and assembly purposes.

Other meetings during the year 1917 were as follows: February 1, (special), March 1 (regular) but adjourned, lacking quorum, May (special), August 30 (special), September 5 (special), October 12 (regular meeting).

¹Taken directly from the records where obtainable

²Later, City Judge in Little Rock.

The following members were elected to membership August 30: Augustine Stoker, O.S.B., New Subiaco Abbey, Subiaco; T. J. Richardson, D.D.S; John P. Almand, architect, Little Rock; Augustine M. Zell, M.D., Little Rock; Walter George Harkey, Lawyer, Little Rock; Woolford B. Baker, teacher of physical and biological sciences; A.D. McNair, agriculturist, U. S. Dept. of Agriculture, Little Rock; H. H. Kirby, M.D., Little Rock.

Because of absences and other duties brought about by the war, the last regular session of the early academy was held October 12, 1917. The sessions consisted of a business session of Trustees (Hotel Marlon), dinner and then adjournment to the Old State House to attend the Annual Program. The Program was as follows: "The Presidental Address" by Morgan Smith, The Action of Some Important Drugs on the Vagus Center" by Charles E. Oates, "Recent Advancement in Internal Secretions" by E. M. Pemberton, "Report on Seventh Facial Nerve in the Albino mouse", by D. A. Rhinehart, "The Contamination of Water Supply" by W. F. Manglesdorf. The following officers were elected for 1918: Pres., Morgan Smith; Vice Pres., Arthur R. Stover; Sec, W. R. Aretz; Treasurer, W. F. Manglesdorf. The following fellow was elected: E.M. Pemberton, B. Sc, M.D., Professor of pathology, University of Arkansas Medical College. The following members were elected: Rev. Henry C. Fromen, B. Sc, A.M., professor of science, Little Rock College; Frank M. Blaisdell, graduate of West Point, Consulting engineer and architect.

The Academy adopted the idea of having one annual meeting. However, the October 12, 1917 session is the only annual meeting of record since the organization functioned scarcely at all after the year 1917. The other earlier meetings were organization sessions to discuss ways to broaden the work and to increase membership. The record shows that other applications for membership were filed but apparently no formal action on the applications were taken, since the organization ceased to function. Among these applications, the following are found: Horace Russel Allen, LL D., major, (Honorary Fellowship proposed), teacher and maker of surgical instruments; Robert S. Medearls, M.D.; John F. Hammett, D.D.S.; Mrs. Bernice Babcock, editorial writer (novels, drama, poetry). Records show no further correspondence beyond the first month of the year 1918, except for an occasional acknowledgment of literature received.

The early academy was planned on the same order as similar organizations in many "other states. Compared to the present organization, the original constitution, with its many classes of members and method of voting, was more formal and conservative and less democratic. The business of the academy, Including the election of officers, was transacted by the trustees. The fellows of the Academy had the power to change the by-laws, to elect the trustees, and to change the number of trustees, except that the number should not be reduced to less than five. In the early form of the constitution the principal office was to be located In Little Rock. After the reorganization in 1932, the principal office was to be In Fayetteville. Both Ideas as to principal office⁵ have now been abolished. The objects of the original organization were the encouragement and fostering of scientific investigation within our state.

In the early thirties, Dr. D. M. Moore learned of the existence of a charter for an academy but that no meetings were being held. In1931, he contacted Mr. Troy Lewis, trustee and secretary, to inquire into the possibility of a revival of the academy. It soon appeared that the original members were too scattered to begin where the last session left off. Therefore, a reorganization proved inevitable.

For purposes of reorganization, Dr. Moore invited as many of the University faculty as could be reached to meet October 26, 1932, for discussion of the possibility of reviving the academy. Ways of cooperating with existing officers for election of new officers and of new trustees were discussed. This faculty group voted unanimously in favor of reviving the academy and worked with Dr. Moore in initiating the reorganization. Dr. Moore was made President of this initiating group and L. B. Ham was made the secretary. The two officers, with three, others³ appointed by the president met October 28 to set up a complete slate of officers and local trustees to be voted upon by the faculty group at the university. The faculty group met November 2, 1932 and elected theremaining officers.⁴ With this authority and support from the local group, Dr. Moore went to Little Rock to complete the reorganization at a meeting In Mr. Lewis' office. Dr. Moore was the only other person In attendance at the meeting of the trustees.⁵ This report appeared as the 16th "annual meeting of the Board of Trustees of the Arkansas Academy of Sciences, Little Rock, Arkansas, November 9, 1932". The report states also that "all members of the old trustees present either by person or by proxy, except Stover, Shipp, Oates and Heagney, Aretz and Brookover are dead or missing and unaccounted for". Dr. Moore was elected President by the trustees and the slate elected previously in FayettevIlle was confirmed. The new trustees elected in Mr. Lewis' office were as follows: W. M. Manglesdorf, M. Smith, T. W. Lewis, C. F. Allen, Flora A. Haas, L. B. Ham, D. M. Moore, L. C. Price, H. H. Schwardt, L. M. Turner.

The dues of three dollars per year, with an Initiation fee of five dollars, were reduced to one dollar⁶ and no Initiation fee at a meetlig of the board of trustees on January 6, 1933. The first annual meeting of the revived academy was held at Hotel Lafayette, Little Rock, April14-15, 1933. Two new trustees were elected as follows: L. M. Turner to succeed himself and G. C. Branner to succeed W. F. Manglesdorf. In order to make the system of fellows and trustees work, It became the sentiment of the meeting that as fast as fellows were taken into the academy from the various colleges that the election of the trustees should be made so as to have each institution of higher learning represented by at least one trustee. Much of the last business meeting of the 1933 academy sessions was devoted to discussions as to possible changes in the by-laws and classification of members. Many of the new members were coming to the conclusion that operating the business of the academy through trustees was not in keeping with present trends of a scientific organization which is open to every qualified scientific worker or scientifically interested person. The work in connection with possible revision was headed by Dr. Flora Haas and was reported at the following year's sessions at Conway.

At the Conway sessions, the members finally agreed that the constitution should be revised under a new corporate title and adopted Dr. Haas' report. The present constitution thus dates back to the Conway sessions. The title was changed to "The Arkansas Academy of Science, Arts and Letters," in the hope of interesting workers in other fields.

At the Arkadelphla session in the spring of 1941 Article I of the constitution was changed so that the title now reads, "The Arkansas Academy of Science". Amendments to the by-laws were made at the Arkadelphia meetings in 1935 and in 1941. There have been no major changes in operation of the Academy since the Conway meeting in 1934.

³H. Hale, H. H. Schwardt, L. M. Turner

⁴Vice President, D. Swartz; Treasurer, H. H. Schwardt; Trustee, L. M. Turner; Trustee, L. C. Price. ⁵Proxies were held by Mr. Lewis for D. Gann, W. P. Manglesdorf, D. A Rhinehart, M. Smith.

⁶The dues have been increased to \$1.50 per year beginning in 1942 to take care of the increased costs due to publication of the Academy proceedings.

Two of the early fellows (and trustees) of the Academy gave much time and very helpful assistance in the reorganization. The one, Mr. Lewis, referred to many times previously, gave important assistance in the mechanics of reorganization. The other, Dr. Morgan Smith⁷ of the University of Arkansas College of Medicine gave freely of his time to acquaint the new organization with the Academy's past history and with the hopes of the former members. Dr. Smith's wide educational vision, his enthusiasm, and his broad understanding of scientific needs of the state were a great asset to the Academy. Dr. Smith did not live long after the reorganization. The Academy is fortunate to become one of the inheritors of his visions.

⁷Dean of University of Arkansas Medical School, first state health officer, representative of Pulaski county in three legislatures. Died September 13, 1935.

This 2016 annual meeting of the Academy is its 100th. Our host is the University of Arkansas and the meeting site is Fayetteville. This is the 14th time that Fayetteville has hosted the Academy. Previous meetings hosted were the 21st, 24th, 32nd, 35th, 38th, 45th, 49th, 53rd, 56th, 62nd, 68th, 75th, and 87th. What follows is the history of the University at Fayetteville from its home page.



HISTORY OF THE UNIVERSITY OF ARKANSAS

The 1871 establishment of the first public university in Arkansas — a state still ravaged and rankled by four years of civil war — might seem to us today to be an act more foolhardy than full of hope.



The founding of the university, however, was one of the few achievements during the state's Reconstruction era that brought former political and military rivals together.

Over the course of its history, the university has continued to bring the citizens of the state together by raising educational standards, improving business and economy, and giving Arkansans a hardy mascot round which to rally.

Read more about our rich history below and <u>stop by our interactive timeline</u> for a walk back through time.

FOUNDING



The state legislature approved establishment of a land-grant university, to be known as the Arkansas Industrial University, on March 27, 1871. The federal Morrill Land Grant Act granted lands to Arkansas that could be sold, the revenues from which could then be used to pay for creation of the university.

The Board of Trustees set about determining a location, asking for cities and counties in the state to put forward bids for the university. Only two bids could be called serious, one by the town of Batesville and a second from Washington County, which offered \$100,000 in bonds, and Fayetteville, which offered an additional \$30,000 and 400 acres of land. This latter bid proved successful, and the board visited Washington County to determine a location, choosing the hilltop farm of William McIlroy as second to none.

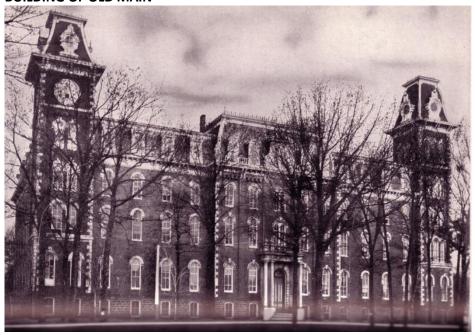
The board purchased 160 acres from McIlroy and approved erection of a temporary frame building in which to hold classes while a permanent building could be planned. Classes began on January 22, 1872, with seven boys and one girl in attendance.

Over the course of the spring and summer, more and more students found their way to Fayetteville. Most of them lacked the preparatory coursework needed to pursue higher education, so the university provided both preparatory coursework and curriculum for a college degree.

More than 100 students attended the university that first year. Only three faculty taught initially, and Noah Putnam Gates served as the first president of the university.

- Among the students that first year was the university's first African American student,
 James McGahee, who came from Woodruff County.
- During the first year, a student was wounded by a knife in an argument over a math problem. Today, we settle those disputes with proofs. Leave the knives at home.
- One student described the journey to the university that first year, riding the Little Rock and Fort Smith Railroad as far as the town of Ozark and then taking a stagecoach to Fayetteville along the route now known as the Pig Trail. On some steep hills, they had to get out and push the coach!

BUILDING OF OLD MAIN



The Board of Trustees appointed a building committee to make plans for construction of a permanent building, a building that would, in essence, be the university.

After a visit to the University of Illinois to see its new main building, the committee sought out its architect, John Van Osdel, the premier architect of Chicago, to purchase plans for the same building at Arkansas. Van Osdel said his original plans had been destroyed in the great Chicago fire but that he would produce new drawings for \$1,000.

Soon, a contract was let and construction begun on the building. Its design is known as Second Empire, with some Italianate touches. The most obvious design elements are the five blocks of the front — the middle entrance, two recessed walls and the two towers — and its mansard roof.

Nearly all of the construction materials came from Arkansas: the sandstone foundation, the bricks fired on the grounds, the limestone window sills and lintels, and wood milled from Ozark forests.

It was finished in 1875 and dedicated on a warm August evening with an all-day picnic spread upon the workbenches in the shadow of the south tower. As the day's light faded, lanterns and bricks soaked in oil were lit and fireworks fired.

It was and remains a building of aspiration, the largest in the state when completed with two towers reaching skyward. Today, those same towers serve as beacons to travelers from all entrances to Fayetteville and the building has become a symbol of higher education in Arkansas.

- The building at the University of Illinois upon which Old Main was based had its towers
 flip-flopped, giving rise to a myth that Union supporters switched the towers here so
 that the taller bell tower would be on the north side, a symbol of their victory.
- When built, Old Main had no electricity, no running water and believe it or not no
 Internet. It does now.
- So many of our academic programs at the university were first taught in Old Main that it is sometimes referred to as the "mother" of the university.
- In the 1980s, university officials considered razing Old Main. Instead, the campus and supporters from across the state raised money to renovate the building and it reopened in 1991 for another century of service.

ON THE HILL

Over the first 50 years, the campus infrastructure grew slowly in a pattern that a regional planner might describe as pastoral growth. You and I might call it hodge-podge. New buildings were added at locations that seemed right for the new building but not necessarily as part of a strategic plan.

Keeping men on one side of campus and women on the other was about as strategic as it got in those early days.



The first men's residence hall, Buchanan Hall, was built west of Old Main. Meanwhile the first women's residence hall, Carnall Hall, named for Ella Howison Carnall, was built near the northeast corner of campus. Filling in the gaps were academic halls, some near Old Main, others farther off.

By the 1920s, however, leaders recognized the need to give the campus a more formal, collegiate look. An architectural firm in St. Louis, Jamieson & Spearl, developed a campus plan that called for demolition of every existing building, including Old Main, and development of a new set of buildings.

As it turned out, the university couldn't afford to remove buildings willy nilly, but it did set about creating a core of buildings designed and placed in accordance with the 1926 Campus Plan, including the Engineering Hall, the Chemistry Building, the Agriculture Building, the Home Economics Building, Memorial Hall and the crowning gem of the bunch, Vol Walker Hall, which was originally the university's library.

Today, the physical campus continues to grow at a rapid pace as we look toward the 21st century. Just since 2000, we've added, renovated or expanded more than 20 buildings, each designed with a strong sense of our historic fabric but also a nod to the future.

Did you know...

- Today, Vol Walker is home to the Fay Jones School of Architecture. The building's
 historic structure and new modernist addition provide design students with a chance to
 see preservation and imagination in tandem.
- The Chi Omega Greek Theatre, a gift from the national sorority to celebrate its founding at the U of A, was inspired by the design of the open-air amphitheaters of classical Greece. It has served as a gathering place for pep rallies, commencements, weddings, concerts and the occasional screening of The Rocky Horror Picture Show.
- The 1926 Plan, though neglected during the latter 20th century, is once again used as a reference by campus planners, who try to create quads and fill in spaces in accord with the spirit of that plan.
- The core section of campus is a recognized historic district and many of the buildings are on the National Register of Historic Places.
- The Old Main Lawn where students play touch football, throw Frisbees and occasionally get in a game of cricket — was initially used for growing oats too.

ACADEMIC AND SCHOLARLY GROWTH

Although the university established a medical college at Little Rock during the late 19th century, its real growth in academic programs on the Fayetteville campus didn't occur until the early 20th century.



A college of agriculture was created in 1905. Soon after, university officials approved a broader restructuring to create the colleges of engineering, education, and arts and science.

All of these subjects had been taught from the beginning as part of the university's classical education, but growth in the student population and addition of faculty allowed deeper and broader investigation of these fields of study and the subsequent creation of colleges and schools.

By the mid-20th century, the university also added a college of business administration, a school of law and a nascent graduate school to develop programs leading to master's and doctoral degrees. Just after World War II, a program in architecture was created that led to establishment of a school of architecture.

Those colleges and schools are our primary degree-granting divisions of the university. But like a quilt overlaying them, three other academic divisions — a school of continuing education, the university libraries and an honors college — give support to each of the degree-granting divisions.

With the academic growth came a commitment to deeper research and scholarly activity. As the research grew, so did the draw of graduate students and federal grants from the National Science Foundation and more recently the National Institutes of Health.

In 2011, the Carnegie Foundation for the Advancement of Teaching added the University of Arkansas to its top level of research institutions, putting it among the top 2 percent based on the number of doctoral degrees granted, the annual research expenditures and our scholarly productivity.

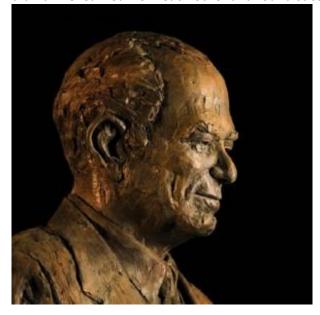
Did you know...

- Bill and Hillary Clinton started their careers as faculty members of the School of Law in the 1970s and were married in Fayetteville.
- J. William Fulbright, the former U.S. senator who created the Fulbright Scholar Program, attended the university 12 years before even starting college. He attended the university's demonstration grade school and high school on campus before his college degree. It's no wonder, though, that he became one of the university's 10 Rhodes Scholars, attending Oxford before heading off to law school.
- In 2003, the Walton Family Charitable Support Foundation gave \$300 million to the university, the largest single gift to any institution of higher education. That gift has transformed the university, creating an Honors College and endowing the Graduate School.

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BROADENING OUR REACH

The university's agricultural outreach began almost as soon as the gates of campus swung open. Over the next few decades, the college of agriculture and its extension network took research about crop, soil and agricultural pests to the farmers themselves in every county of the state. We listened to hear their needs; they tried out our research to see what worked and what didn't. We learned from each other and found success together.



Building on that experience, in 1951 the University of Arkansas became the first land-grant institution in the nation to assemble an agricultural foreign mission, one to the nation of Panama. It's not as easy as driving down to Stuttgart to visit the state rice research center, but the international mission wasn't so different otherwise.

As with any cooperative venture, we learned as much about ourselves as did the Panamanians, and we have both reaped rich dividends in student exchanges, technology transfers and good, smart agricultural practices. A side benefit: The Arkansas Alumni Association established its first international alumni chapter in Panama in 2010.

J. William Fulbright, an alumnus and former president of the University of Arkansas, took the ideals of the Rhodes Scholarship and multiplied them exponentially when he was a U.S. senator, writing legislation to create the Fulbright Scholarship Program, an educational exchange among the nations of the world.

As Fulbright once put it: "International education exchange is the most significant current project designed to continue the process of humanizing mankind to the point, we would hope, that nations can learn to live in peace."

We continue in that spirit, welcoming droves of international students to our campus and sending our students into the world to study abroad. Both instances make us better global citizens, more aware of our cultural similarities and more understanding of our cultural differences.

- In nationwide competition among Pi Beta Phi members in 1913, Mary Droke of the
 University of Arkansas was awarded the Pi Phi Fellowship, a scholarly award that
 provided her one year of attendance at the University of Paris. Droke had finished a
 degree in music and was well on her way to finishing a mathematics degree.
- The university's first international alumni chapter was established in Panama in 2012.
- More than 700 students studied abroad in more than 40 countries this year.





Our motto is "Students First" to remind students that this is a warm, welcoming campus. So it might seem contrary to leave the subject of students for the last chapter in this brief history of the university.

In history, though, recall that the end of the book is always the most recent development in history, the freshest moment, the newest big deal. In essence, for any university, that latest great thing will always be the corps of first-year students.

They show up each year for orientation, a little wide-eyed and bewildered, a bit frenetic and barely able to contain their energy, but also open minded and almost dreamy about the possibilities that the future holds. In that sense, our students have not changed one whit over the last 140 years, save perhaps the fashions they wear.

On the other hand, our students have changed the university in significant ways.

Students initiated the change of the university's name from Arkansas Industrial University to the University of Arkansas in 1899. Students chose the school colors in 1895. Students picked the Razorback as their mascot in 1910.



Our students campaigned for construction of the first student union, Memorial Hall, and for development of the Health, Physical Education and Recreation Building, giving their time, their creativity and their money to secure both buildings.

They wrote the university's first magazine in 1893, published the first yearbook in 1897, edited the first campus newspaper in 1906, broadcast the first student radio show in 1924 and the first television show in 1996. A student wrote the words to the *Alma Mater* and another wrote the *Fight Song*.

A student – Silas Hunt – was the driving force in integrating our university, peacefully and without litigation. His actions led others to seek enrollment at the segregated white colleges across the South and inspired the students who followed him here at the university to pursue integration of housing, diversity in the faculty ranks and equality on the athletic playing field.

Students are like the constantly roiling waters of an Ozark stream, slowly but surely cutting deep hollows into the mountains and changing forever the landscape of the Hill.

- Today, the University of Arkansas provides more than \$85 million in financial assistance and scholarships each year. We are one of the few highly selective institutions to award both need-based and merit-based aid.
- Hank Hancock, then a student at the university, drew the first version of what we now call the "Running Razorback" in 1923. He drew it "full speed ahead."
- "Crip" Hall, a student during the 1920s, organized the first Homecoming, a time for alumni to return to campus and see what has changed.
- Five students have been awarded the Medal of Honor Maurice Britt, Nathan Gordon, Edgar "Buck" Lloyd and Seymour Terry during World War II and James Stone during the Korean War.