A Mid-Century View of Science and Mathematics at Austin College, 1940-1975
by John M. Richardson

In 1940, the science and mathematics faculty included James B. Moorman, Dean and Professor of Biology and Dr. Walter Steffey, Professor of Physics, both of whom joined the faculty in the 1920’s. Joining the Chemistry faculty in the 1930’s were two Austin College alumni, Dr. George Landolt, Class of 1923, and Sherman native Park Street Wharton, Class of 1930. In the 1940’s, two more alumni joined the faculty: Biologists Dr. M. D. (Bud) Bryant, Class of 1927 and Forrest Bryant, Class of 1941. In the Mathematics department, Dr. Steffey, Rollin Rolfe, and Luther Petty taught courses. Most of the science labs were held in Thompson Hall, which was built in 1913. The number of students at the college was approximately 340.

A building boom had started in the late 1940s with Coffin Hall and the Ad Building being completed, Hughey Gym opening in the spring of 1950, the Student Union and Adams Health Center being finished in the early 1950’s and by 1958 Wynne Chapel was under construction. In September, 1953, John D. Moseley, became the President of Austin College. With funding from the Ford Foundation and the Moody Foundation, Moseley began to move the college forward, culminating in the 1960’s in a revised curriculum and the planning for the Moody Science Center.

In 1959, two newly minted Ph.D.s in physics were hired: Dr. Lloyd Gourley and Dr. Mary Foulks Gourley. Dr. Lloyd Gourley was in the Physics department while Dr. Mary Gourley held a joint appointment in Physics and Mathematics. Dr. Mary Gourley was the first tenure track woman in Science and Mathematics. They held grants from the Research Corporation and Bureau of Navy. Their main research focus was to understand exactly what happens when a projectile strikes a metal surface; the Navy was funding this work to develop better armor for the soldiers and sailors serving their country.

A new science and mathematics building was eagerly awaited by members of the faculty including Mathematicians Ray Woodrow and Dr. Thomas Kimes. Kimes recalls his first faculty office was in Sherman Hall and later in Wynne Chapel because of lack of space in Thompson Hall.

Dr. Frank Edwards, a chemist, joined the faculty in 1961, and besides teaching chemistry, was also involved in the planning of the new Moody Science Building. Later Dr. Edwards was a key player developing and managing the Total Institutional Program ($552,500 in grant funds), which included an innovative restructuring of the calendar and curriculum, allowing the college to purchase media equipment, and to train and educate the faculty and students on new approaches of pedagogical engagement.
Dr. Moseley, the Ford Foundation, National Science Foundation, and National Endowment for the Humanities were major players in this ground-breaking approach to the curriculum at the college. An internal report between the NSF and NEH shared with the college stated:

“The proposal requests substantial financial support for a different and perhaps a high risk undertaking. It is requiring of Austin College not only a commitment to major financial underwriting during and beyond the project but also a commitment of its very life and future. Austin College is staking its reputation and future on the fact that the College and its faculty and students can change and in so doing develop understanding of the necessary process of self-renewal. Our commitment extends beyond Austin College, as the proposal calls for sharing insights learned with others and thereby benefitting higher education generally. Therefore, this cannot be a timid or half-way venture—it must be an all-out effort.”

Joining the Biology faculty in 1961 was Dr. Howard McCarley, Class of 1948, who recalled moving the Biology department into the new Moody Science Center. Since he taught lectures and labs in four buildings (Cern, Administration Building, an Army Surplus building, and Thompson Hall), much planning needed to be done. The physical manpower was provided by the Austin College football players who walked everything from the buildings into the third floor of Moody Science.

Moody Science was dedicated on October 11, 1965. Dr. Laurence M. Gould, senior scientist and second in command of the 1928 Byrd Antarctic expedition, delivered a convocation address on “Science and the Culture of Our Times.” Honorary degrees were bestowed to Austin College alumni Dr. Royston Roberts, professor of Chemistry at the University of Texas, and Dr. Joe Dennis, Chair of Chemistry at Texas Technological College. The building was the largest on campus at that time (54,000 square feet), and contained 22 laboratories and 11 classrooms.

Prior to the construction of Moody Science, science classes were taught all over campus, and students fondly remember this time. Robbi Arnett, Class of 1965, remembered the spring of her sophomore year (1963), Dr. Howard McCarley (known to his students as “Doc”) offered Vertebrate Zoology—an upper level field study course. “Lab was in the ramshackle maintenance building just west of Nurse Jane’s Clinic. We captured a variety of critters, made study skins, learned about ecology, dichotomous keys, and habitats.”

The construction of Moody Science was remembered as being disruptive. Dale Eichenberger, Class of 1968, recalls a physics introductory class on “Light and Sound” which was held on the second floor of Thompson Hall. “Since Thompson Hall was not
air conditioned, we had open windows letting us hear loud and continuous noise from the construction of Moody Science to complement all of the lectures and lab activities. It was especially challenging for a physics lab experiment to collect audio frequency noise data needed to determine the transmission pattern for a hi-fi speaker. Physics Professor James Hughes had a huge smile on his face as he explained that he wanted our lab reports to describe accurately what the data said.”

The new science and mathematics facility also improved the scientific instrumentation on campus from what John Travis, Class of 1962, recalled as “My first experience with oscilloscopes was with WW II surplus DuMont units that had flown on bombers powered by 27 V DC (I think). It led me to a great appreciation for the modern instruments I encountered (in graduate school) at UT, but a respect for the Austin College physics faculty for making do with surplus equipment.”

Grants
This era also marked a significant effort to bring in funding from off-campus sources including the National Science Foundation (NSF). Dr. Howard McCarley wrote several successful applications to study the behavior of ground squirrels in Grayson County. John Landolt, Class of 1965, remembers “As a junior or senior, I also spent some time one winter periodically checking on and weighing Dr. McCarley’s hibernating ground squirrels in an old frame building on campus. I still have a scar or two on my fingers from bites delivered by awakened animals. I also spent some time on the local golf course “fishing” for ground squirrels to check for identifying marks on animals and sometimes marking animals that had not been previously marked by dyes and/or toe clips.”

The Chemistry Department, under the leadership of Dr. Frank Edwards, also submitted several successful proposals in excess of $30,000 to completely reconstruct the curriculum at the introductory and advanced levels and fill the labs with modern instrumentation. In 1964, Dr. William “Barney” Guerrant, Class of 1946 and son of a past president of the college, was awarded a $36,000 grant from the Welch Foundation for his research in Organic Chemistry.

Also in 1964, Dr. Thomas Kimes and the college received word from the NSF that it was awarded a grant for $28,000 to cover half the cost for the purchase an IBM 1620 digital computer, the first one on campus. Although it was among the most advanced computers of its day, we should note that by today’s standards it was only as powerful as a child’s toy.

Then as today students remember the transformative elements of their education and the rigor of their professors. John Landolt, Class of 1965, recalls taking Comparative Anatomy as a sophomore. “It was a two-semester course then. Many of the majors were
interested in pre-med, but it was then, as it probably still is, a class that changed the minds of a lot of students as to pursuing a major in biology.”

Sandy Beach, Class of 1968, remembers Dr. Bud Bryant and his legendary rigorous academic standards for Biology students in the late 1960's. “His Systematic Botany final exam had two parts and it was given on a Saturday. Starting at 8 am, we carpooled all around Grayson County. Dr. Bryant would point to a plant and ask us a question about it. At noon, we ended up at his cabin on Lake Texoma. We ate our sack lunches. Then he handed out a four-hour, all-essay exam. After the class was finished at 5 p.m., he cooked hamburgers for everyone.”

Students also remember the unique times they had working with the faculty during this time. Claire Wilda, Class of 1971, served as a Teaching Assistant in Chemistry as well as graded tests for Dr. Frank C. Edwards. “Even though he was chairman of the department, he still enjoyed teaching freshman chemistry. But he didn’t like to grade tests. So he would grade one test at my insistence. I would grade all the others that same night. One of my fondest memories is of Dr. Edwards sitting at his desk, grading a test, muttering, ‘Slave Driver,’ under his breath.”

Dale Eichenberger, Class of 1968, remembered, “As a senior, I was a member of the first course in quantum mechanics taught at Austin College. It was taught by Timothy ling-Sung Nee whom, I think, was in the process of getting, but had not yet received, his Ph.D. in physics. The course was excellent; but the strongest memory is that his wife enrolled in an Austin College class scheduled for the same 8:00 AM M-W-F time for the entire fall semester. This created a family problem for the Nees for taking care of their 6 month-old baby while both did what they had scheduled on campus. Those of us taking the course helped resolve their worries. The Nees lived across Grand Avenue no more than a couple of blocks away from campus; for every class, we students walked over, went into their kitchen, and sat around the breakfast table listening to his quantum mechanics lectures while he fed his son breakfast. We also got a cup of coffee and at least an offer for toast or a bowl of cereal for ourselves. We didn’t pay any attention to time to end class and had a far more vibrant discussion than in a classroom. It was definitely a lot more fun going to class in a kitchen than doing the assigned homework.”

The next exhibit will highlight the 1975-2013 time period as well as celebrate the opening of the new IDEA Center. Stories of faculty and staff who were hired in the mid-1960s to mid-1970s, such as chemists Charles Barr, Hank Gibson, and Mike Imhoff; physicist Larry Robinson; mathematician Don Williams; biologists Jack Pierce and Karl Haller; and computer scientist Wilbur Powell will be included.