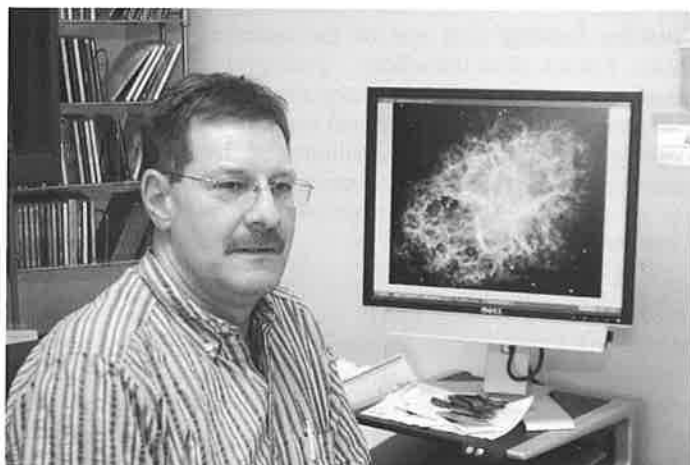


President of the Tennessee Academy of Science for 2019: Allyn Smith



I was born into a farm family, except we were living in St. Louis at the time. My parents moved to central Illinois when I was about six months old. This was followed by a second move after I finished second grade to the farm I came to call home. Just prior to this move, I had the first of a few epiphanies. I had the measles in second grade, and I was at home the day John Glenn was launched into orbit. I watched the flight and decided that would be my future. My father was a corn breeder (read that as an experimental research geneticist) and my mother was a Technical Writer for the Illinois State Geological Survey. This allowed me the opportunity to develop a feel for areas of science research. I worked in the research plots for my father and quickly decided farming was not what I was interested in. On weekends (when not in the corn fields) we ventured out on geology field trips around Illinois and neighboring states.

I went to an interesting high school—one with a serious emphasis on academics. Athletics were truly “extra-curricular” activities, although my senior year I was the only three-sport letter-man in the school. However, I was exposed to math and sciences in a major way. My biology, chemistry, and physics classes spurred increasing interest in each of these fields, enough so I took a second year of each. Along the way I developed an interest in model rocketry (recall John Glenn’s launch), and this was a driving activity through the rest of high school and ultimately played a major role in my choice of colleges. But, in one of my physics classes, I noticed a small telescope up on one of the shelves. The teacher allowed me to check this out to use at home, and one of my friends offered encouragement as he also had an interest in astronomy. This led to each of us building our own telescopes—grinding the mirrors by hand, building the mounts, etc.

Upon graduation, the choices of colleges came up. Unlike one of our previous Presidents (Dr. Fred Matthews, 2016) all but one of my classmates went on to university, and now 38 of the 43 of us have Ph.D.’s, M.D.s, or J.D.s. Ultimately, even though my family bled orange and blue (six generations and counting), I chose a small, young, private engineering school in

Florida: The Florida Institute of Technology (FIT; Florida Tech today). I had decided Astrobiology was the path of study I wanted to follow (50 years too soon), and FIT would craft a degree plan for me since the biology department was new (I was in the second full year of the major). My classes essentially turned into a Molecular Biology degree with a minor in Chemistry, although we didn’t have minors back then. You can’t go to school in Florida without taking up SCUBA diving or surfing. I chose the former and that spurred a love of the outdoors. I also turned into an avid hiker.

I had the good fortune of graduating in the mid-1970s, right as the tsunami of the environmental movement hit. Without a 4.0 GPA, I was not going to graduate school in the field, and without a 3.9, I was not getting a job in the field. The Chair of the Physics Department came to my rescue and offered me an assistantship if I was willing to switch to Space Sciences (the Astronomy side of the department) and pursue an M.S. degree. I jumped at the chance since I would be working in astronomy. This change in career paths would lead me to my first encounter with a State Academy of Sciences, this time in Florida. I saw, as a student, what the Academy could do for members in a state in a particular field. The meetings were enjoyable to attend and informative.

Upon completing all the classwork and my research project, I applied for a job at Kennedy Space Center. I still wanted to do “space stuff”. I was offered a position with the ground support contractor for the NASA Design Engineering Directorate, because of my B.S. in Biology. I started work in the Life Sciences support group, a small group of two of us. My supervisor (a Mechanical Engineer) left to work for the payload operations contractor after about 3 months, and I ended up as a lead engineer in a group of one. We quickly expanded as shuttle preparations picked up, and within three years I was the lead of a group of 16 scientists and engineers working on life science support, environmental assessment, and long-range planning.

After the fourth shuttle launch (1982), I had the opportunity to jump to the vehicle operations contractor, and I took it. I remained with the launch operations group for 11 years, earning a second M.S. degree along the way, this one in Space Systems Operations (what they call it now)—essentially Engineering Management for space systems. I stayed in this group through the Challenger accident and the return to flight. By this time, FIT had developed a Ph.D. in Space Sciences, so I completed my course work while still working at the space center. A well-timed RIF allowed me to jump back to school full-time for the qualifying exams and dissertation research.

I left FIT a year before completing my dissertation defense (finishing *in absentia*, something I do not recommend) for a post-doctoral position at the University of Michigan. My task was to develop the standard star network for the Sloan Digital Sky Survey (SDSS) calibration effort. More importantly, I formed some long-term collaborative efforts with several scientists at Fermilab which I maintain to this day. This was followed by a 2.5 year visiting position at the University of

Wyoming, and then nearly four years at Los Alamos National Labs (LANL) working in the Threat Detection and Response Directorate. During this time, I continued working on projects in the SDSS. It turns out, supernovae look a lot like things we were interested in threat detection. The time at LANL also got me involved in some space-related futuristic projects such as the space elevator,

I returned to academia in 2006 when I came to Austin Peay State University (APSU). The Physics and Astronomy department was growing, and research was starting to become more important for faculty. As things happen, APSU hosted the TAS meeting in the fall of 2006. That is when I became acquainted with the Tennessee Academy. My teaching schedule interfered with attending several of the following meetings, but I kept supporting students and encouraging them to attend. In 2015, I had the chance to attend the MTSU meeting and have been fully

engaged since. I was invited to join the Executive Council by Dr. Fred Matthews in 2016 and eventually became the Annual Meeting Coordinator. I consider this to be an important office as it forces me to reach out to other universities. I plan to try to visit as many campuses as possible in the coming years.

I look forward to working with everyone during the coming year. We are in the process of enhancing the Journal publication and distribution method, and I plan to explore holding a joint academy meeting with one of the surrounding states in the future. I thank all of the officers – past, present, and future – for all of the work and effort to keep the academy functioning as well as the members for continued support and their intellectual contributions to the general meetings and the governance of the academy. I look forward to an exciting year ahead and hope to see everyone at the November meeting at Columbia State Community College.