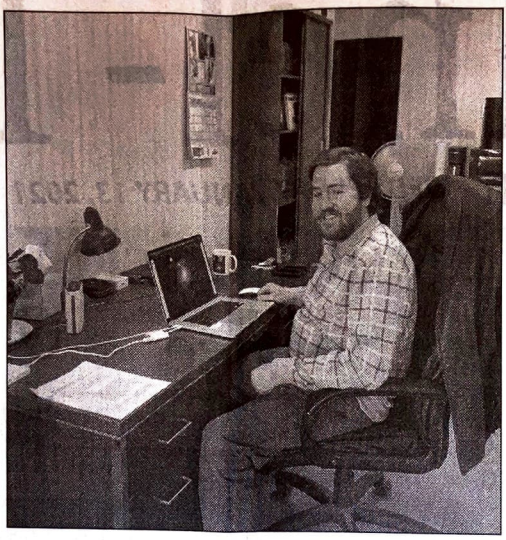
In Our Midst – Fast Forward



David Nelson | Galena, Kansas

Last week, The Sentinel reran an article I had written several years ago touting the exploration of the skies by a former Riverton High School student, who happened to be my nephew. Last week's article laid the groundwork, if you were wondering why it appeared in the newspaper, albeit we should have prefaced the article with a note about when it was first published, but fast forward to today . . . ON Main Street Galena, Kansas, we have research going on right here that spans our globe and the universe.

We currently have Dr. Ben Davis, who is working for New York University Abu Dhabi, working here in Galena since the first of September when the university decided to keep their campus closed in the United Arab Emirates because of Covid-19, so he has been working remotely. The university itself is conducting all Spring Semester classes closed with "remote plus" instruction. Ben indicated that he will probably not be migrating to Abu Dhabi until the Fall of 2021, or until the pandemic has abated and they decide to reopen the campus. So . . . he is working next door, Main Street Galena. I set up a small office for him during the interim so he could continue to work on his research, his research papers, and articles, and communicate via video conferencing with his coworkers in Abu Dhabi and researchers around the world, sometimes several times a day.

Technically, Ben is working for New York University - Abu Dhabi Campus: Abu Dhabi, Abu Dhabi, UAE, as a Research Associate and Fellow of the Center for Astro, Particle, and Planetary Physics. Still an early-career researcher, Ben has already authored 18 peer-reviewed publications in high-impact scientific journals, including The Astrophysical Journal, Monthly Notices of the Royal Astronomical Society, etc. His papers have proven influential to the astronomical community, with over 500 citations throughout the literature. Before the pandemic, Ben regularly traveled the world to present his scientific results at international astrophysics conferences.

Little did you know, from our communities here in Cherokee County, we have untold stories of many former high school graduates that have ventured out throughout this country and world, in their professions, to excel and contribute to our society, no matter what the profession or path they chose to take. We have graduates that work every day in our communities and neighboring communities doing what they love to do, whether as a teacher (teaching the future explorer) or doctors, nurses, business owners, engineers, millwrights, welders, and so on. Each contributing and helping build our communities. There are all walks of life around us; we just need to be aware of our surroundings in our small corner of the world.

So back to the story . . . Dr. Ben Davis graduated from Riverton High School in 2003 and graduated from Pittsburg State University, Pittsburg, KS with a Bachelor of Science (B.S.) in Mathematics & Physics and a Minor in Music in 2008, graduating Magna Cum Laude. He earned his doctorate at the University of Arkansas in 2015, under the guidance of his doctoral advisor, Dr. Julia Kennefick. After earning his Ph.D., he remained in Arkansas and taught as a Visiting Assistant Professor of Physics at both the University of Arkansas and Arkansas Tech University. In 2016, Ben relocated to Melbourne, Australia, where he began a postdoctoral position at Swinburne University of Technology. While there, he worked with Prof. Alister Graham for four years. He returned to Kansas back in June of 2020, awaiting his move to the United Arab Emirates.

Ben noted that his main attraction to moving to Australia and working with the Swinburne University was for the opportunity to work with Prof. Alister Graham, whom he considered to be one of the world's foremost experts in his field. During his time at the university, he learned much including working with cutting-edge software that their research group utilized. In simpler terms, Ben's research involves studying the structure of spiral galaxies. To do this, he examines the geometry of spiral arms, using a suite of custom software he helped design. He also performs multi-component decompositional analyses of galaxies to separate them into their constituent components (i.e., bulge, disk, bar, spiral arms, nucleus, etc.). With this detailed knowledge of galaxy composition and geometry, he can then construct accurate black hole mass scaling relations that yield mass predictions for central massive black holes in galaxies. By conducting a census of black hole demography in galaxies, future studies can better understand the intimate relationship between central black holes and their host galaxies, and garner information about their coevolution.

His recent research pursuits include using black hole mass scaling relations to predict galaxies that harbor intermediate-mass black holes (IMBHs). The proper contribution of IMBHs to the black hole mass function will provide an enhanced understanding of the coevolution of galaxies and black holes. This involves studying observations of the Hubble Space Telescope and the Chandra X-ray Observatory to identify infrared/X-ray counterparts that signal the presence of active black holes.

Ben is the son of Sara and Jeff Davis of Riverton. In the interim, Ben and his wife Nicolette reside here in Cherokee County – awaiting their next adventure. I do encourage others, whether parents, grandparents, friends, or siblings, if you have a unique story about someone in your family, whether living in the four-states or some foreign land, The Sentinel would be interested in promoting their story because it promotes their roots, our local communities.

Galena USD#499 Hires Director of Operations

The Board of Education of Galena Unified School District #499 met in regular session on

Monday, January 11, 2021 at 6:30 P.M. with members Mr. Mike Gibson, Mr. Stephen Hall, Mr.

Lawrence Miller, Mrs. Denise Titus, and Ms. Glenda Reeves present. Mrs. Jaime Boyes and Mr.

William VanCleave absent.

The board voted to approve the following as presented: