

We're all radioactive:

A millennial's perspective on nuclear

BY JUAN RIOS

Nuclear may be my job, but it's everyone's business. A little bit about me: I'm a 25-year-old University of Florida graduate working for Savannah River Nuclear Solutions at the Savannah River Site (SRS). As part of the H Area Process Control & Automation Engineering group, I help develop and maintain the applications that are used by H Area operators. I have always enjoyed science education outreach events, and I joined CNTA to give back to the community.

Hailing from Tampa, Florida, I now reside in Aiken.

No matter where we go, radiation is everywhere. Natural sources of radiation are around us all the time. It's part of being on Earth!

In fact, many of the foods we enjoy – bananas, carrots, beer – have naturally occurring radiation. Even ice cream is irradiated to kill bacteria, increase shelf life, and eliminate pests. The ice cream itself is not radioactive. (More on that here: www.fda.gov/food/resourcesforyou/consumers/ucm261680.htm).

Another common source of radiation is cosmic rays, or high-energy particles originating outside our solar system. Locations at higher altitudes receive more cosmic rays than those closer to sea level. That means you can receive a greater dose of radiation living in Denver than you would at SRS. Kind of ironic, don't you think?



Rios

Another comparison, just for fun: A single procedure of a whole-body CT scan emits 1,000 millirems (mrem, a measurement of radiation dose). Those who live near Plant Vogtle, the local nuclear power plant, receive an annual dose of less than 1 mrem from that power plant source. (Fact check here: www.epa.gov/radiation/radiation-sources-and-doses).

Mankind harnessed the power of nuclear physics during wartime, but its benefits far outweigh its threats. The medical field in particular has benefitted tremendously from nuclear technology advancement. Think X-rays, radiation therapy, etc. Simply put, nuclear technology saves lives. Nuclear technology is also used to power deep space exploration missions. In fact, HB Line at SRS has its own claim to nuclear fame: This facility produced the Plutonium-238 used to power multiple spacecraft like Viking, Galileo, and Cassini, among others. Its plutonium is powering the Curiosity mobile lab as it travels across Mars.

Now you know that you are radioactive and all the benefits that come along with it. What do you do now? My advice? Be informed and get involved.

Be informed. Millennials love opinions, but it's important to have an informed opinion. Don't fall into the myth pits. Do your research. Follow nuclear advocacy groups on social media, browse blog posts on hot topics, and read the news.

Some good pages to follow are the Nuclear Energy Institute (@NEI), American Nuclear Society (@ans_org), and of course CNTA.

The more you read up on the topic of nuclear, the more background you will have. When you're armed with knowledge, you're ready to understand and make good decisions. Be an informed citizen. #TheMoreYouKnow

Get involved. This wouldn't be a millennial-authored column without a call to action. No matter what generation you belong to, everyone wants to see a change. Change happens when you get involved. Nuclear technology is something I am passionate about. That's why I joined CNTA—to help spread the awareness of the bountiful benefits of nuclear technology. A good place to start is www.c-n-t-a.com to find out ways you can help educate and spread nuclear technology awareness!

My generation and those behind me are the future of nuclear advancement. That's one reason I enjoy my job is nuclear.

But now you see it's everyone's business.

ATOMS IN THE ALLEY

Nuclear Science Week concludes with a celebration in the Alley

SUBMITTED ARTICLE

The Savannah River Site Museum will wrap up Nuclear Science Week 2018 with a block party in Aiken's The Alley on Saturday, October 20. Atoms in the Alley will be held from 5 – 7 pm. The public is encouraged to attend the celebration.

"The SRS Museum is once again proud to host this special event that celebrates our community's nuclear science history." Walt Joseph, Executive Director of the SRS Heritage Foundation stated. "We hope a large crowd will come out to celebrate with us!"

The event will feature live music from Atomic Road in conjunction with the Aiken Downtown Development's Aiken City Limits (ACL) Music Festival. The ACL festival will feature music throughout the community at various venues.

In addition to live music, the event will feature educa-

tional exhibits from industry partners and event sponsors to include the Savannah River National Laboratory (SRNL), Citizens for Nuclear Technology Awareness (CNTA), the University of Georgia's Savannah River Ecology Lab (SREL) and more. Additional crafters and artisans will be on hand showcasing their wares. Restaurants located in the Alley have been invited to participate in the celebration as well.

Atoms in the Alley is a free, family-friendly event that promotes science and raises awareness of the Savannah River Site Museum. It is part of Nuclear Science Week which is a week-long celebration to focus on local, regional, national and international interest on all aspects of nuclear science. Nuclear Science Week takes place internationally each year in the third week in October.

Look for the SRS Museum on Facebook for more information about Atoms in the Alley or call the SRS Museum at (803) 648-1427.



SUBMITTED PHOTO

Last year's Atoms in the Alley caught the eye and engaged the brain of a possible-scientist-to-be.