The pathway to becoming the chair of the working group for the American Nuclear Society’s (ANS) revised position statement 41 on the health effects of low-level ionizing radiation, an astronaut radiation and dosimetry researcher, the principal scientist for the Battery-operated Independent Radiation Detector (BIRD), and October’s CHP in the Spotlight begins in Kansas City, Kansas. Amir Bahadori, PhD, CHP spent the summers of his youth at his grandfather’s farm in north central Kansas helping with the wheat harvest. Inside institutions of higher learning, he excelled at Kansas State University (KSU) and ultimately at the University of Florida (UF) chasing his interest in proton therapy and ultimately earning a PhD. Proton therapy wasn’t the only thing he was chasing; it was at UF where he met his wife. Let’s not mince words: he’s quick to tell everyone “The best outcome from my time in graduate school was meeting my wife, who earned an MS in Nuclear and Radiological Engineering in 2010. The second-best outcome was earning my PhD.” He gives a lot of credit to his parents for instilling in him a desire to pursue both higher education and diverse experiences to help make him a more well-rounded person.

Did I mention he’s among the elite few to have been an NRC-licensed reactor operator at the KSU TRIGA Mark II reactor during his undergraduate studies? But first, more on the BIRD. As the principal scientist for the BIRD, Amir worked with a diverse and talented team, helping to design, build, test, and certify the BIRD and then watch it launch to space aboard Exploration Flight Test 1 in December 2014. This was the historic first flight of NASA’s Orion spacecraft and a huge success for all scientists and engineers involved. The data were successfully retrieved upon return to Earth and published in a NASA Technical Report. In 2018 he was awarded the Zeldovich Medal for COSPAR Scientific Commission F, Life Sciences as Related to Space, for his work on space radiation pixel detectors. His research in active radiation shielding to help protect astronauts in space continues to today.

Amir’s work with the ANS position statement 41, to be published hopefully by the end of the year, has been incredibly challenging, he says, because “the topic is one of the most nuanced and divisive areas of health physics.” In the midst of a presidential election, I think that statement is one in which we can all definitely agree.

Encouraged by his group leader and mentor at NASA, Eddie Semones, Amir pursued certification in 2014. His thorough preparation work for both Part 1 and Part 2, in 2014 and 2015 respectively, lent him a gut feeling that he passed both exams on the first try. With his graduate studies still fresh in his mind, much of his studying became review of topics learned at KSU and UF. His advice for future exam takers: “Don’t cram; and don’t EVER give up.” For any of your colleagues or mentees who say they’re too busy to study for the CHP exam, consider Amir took part 1 with a young baby at home and part 2 while his wife was 9 months pregnant with their second child, all while working full time!

Through a fabulously diverse and astronomically productive career thus far, here’s a toast to Amir Bahadori, our October 2020 CHP in the Spotlight!