

WHAT CAN PHYSICISTS DO?

An interview series that profiles scientists who opted for careers outside of academia.

Dwayne Bryant works with cancer patients

By Toni Feder

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MS, medical physics, Columbia University, 2026

How did you figure out what you wanted to do?

I knew that I wasn't interested in becoming a professor. My physics undergraduate program offered a certificate in health physics, for which I took a couple of extra classes and did an internship. I got experience and connections with people in the field.

(Photo courtesy of Columbia University Environmental Health and Safety.)



What were you looking for in a job?

I had shadowed health physicists and learned about radiation safety. That was a positive experience. I applied to a bunch of jobs in radiation safety. I knew that I wanted to make a difference by directly helping people.

How do you spend your time?

I provide patients with information about radiopharmaceutical treatments and give them patient-specific instructions on topics like how long to keep their distance from other people or when it is safe to hold children for extended periods of time. I facilitate the administration of radioactive materials. And I make sure the dose is correct. I continue as a liaison to the patient after the treatment.

One of the nice things about this job is that your day-to-day isn't the same. Some days, I do regulatory paperwork or test equipment. I make sure the clinical health physics team's radioactive waste is safely stored or disposed of. And I perform shielding evaluations for the hospital.

What do you like about your job?

I love what I do. You form a connection with the patients. It gives a sense of fulfillment when they are going through a difficult time in life. Being able to have that impact and help someone is really fulfilling.

How do you use your physics?

I do calculations related to patient therapy treatment and shielding evaluations. Physics is also important for understanding how radiation interacts with the human body. Photons interact differently than electrons or neutrons. I also provide supplementary training for nurses and new staff.

What new skills did you need to learn?

It's really important to have the ability to communicate. And to learn to work on a team.

What is the salary range?

Straight out of college, you can make anywhere from \$60 000 to \$80 000 a year as a health physicist.

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