

TRADE TALK

Support system



Panagiotis Vagenas studied substance misuse and its effect on HIV transmission while he was a staff scientist at Yale School of Medicine in New Haven, Connecticut. Now he works for the non-profit Project

Concern International (PCI) in San Diego, California, where he helps scientists in the field to design and carry out their projects.

How did you start out on this track?

What's always motivated me is trying to help people. So, in 2010, I did a master's in public health after a postdoc in basic HIV research at Rockefeller University in New York City, and eventually joined Yale.

Why did you leave Yale?

I didn't get a grant I applied for, and thought it was time to move on.

What do you do now?

I advise field teams at PCI on how to answer a research question — from forming a hypothesis and helping to write the research protocol to going through the ethics approval process. I make sure that everyone follows the same standard of high-quality, rigorous research as in academia.

Why do you like the job?

I can clearly see the impact of my work. Last summer, I went to Guatemala, and met some people involved in PCI's micro-financing programme for women. Many told me that the programme had helped them to find a social network and become financially empowered. That experience made it all worth it.

Do you have any regrets?

I made the right choice in leaving Yale. Three months after starting this job, I found out I'd got my grant after all. It was a bittersweet moment — but I withdrew my application.

What advice would you give anyone hoping to change careers?

I had to soul search to work out what I wanted to do. I was extremely proud to be a faculty member at Yale, but you need to think about who you want to be and make a bold move when you feel that it is right. ■

INTERVIEW BY JACK LEEMING

This interview has been edited for length and clarity. See go.nature.com/2k2nh2n for more.



Evolutionary biologist Beth Shapiro is a published science non-fiction author.

KRISKRUG/POPTTECH

interesting and allows non-scientists to relate more closely to research and to palaeontology itself.

If all of this sounds as though it takes a lot of time, it does. "I work all the time," says Bistulfi. And the time sink isn't the only downside of moonlighting. Published work, particularly if it is not connected to one's research, can raise eyebrows among colleagues and superiors. And, like many aspects of research itself, writing can be a lonely pursuit. But many maintain that it becomes a compulsion. "Once you do something you love," says Bistulfi, "it doesn't feel like work."

Some researchers weave their work into their writing. Clinical epidemiologist Anne McTiernan co-wrote *Breast Fitness* (St. Martin's Press, 2000), which explores the connection between exercise and a lowered risk of breast cancer. She then started *Grandma Doc*, a blog that discusses health care and her life as a researcher, physician and grandmother.

McTiernan decided to build the blogposts into a larger, more cohesive body of work. Thus began her coming-of-age memoir *Starved: A Nutrition Doctor's Journey From Empty to Full* (Central Recovery Press, 2016), which delves deeply into her childhood struggle with both anorexia and obesity, and her adult life as a medical practitioner and researcher at the Fred Hutchinson Cancer Research Center in Seattle, Washington. McTiernan says that writing the book has helped her to excavate long-buried emotions that give her insight into her patients' struggles and improve her research. "When you're writing a memoir, it puts you in touch

with feelings," she says. "It has reminded me how difficult it is to have weight issues. Now I really feel for those patients in clinical trials who have been trying to lose weight."

Osmo Pekonen, a mathematician at the University of Jyväskylä in Finland, finds a connection between maths and poetry. "The art of poetry is a matter of condensing meaning into a single beautiful and striking line, and a mathematical formula does the same," he says. Like poets or philosophers, mathematicians explore the realm of the spirit, whereas physicists, chemists and others deal with matter, adds Pekonen, who writes poems, reviews, essays, and books about poetry and poets.

He has organized an annual international conference called Bridges on the link between maths and poetry, and is book reviews editor for *The Mathematical Intelligencer*, a magazine published by Springer that explores the human side of maths. "Like a new mathematical theory, creative poetry can encompass an entire world in a condensed form," he says. "Mathematical rigour and poetical fantasy inform each other in my thinking. Mathematics seems to represent structure while poetry carries the spirit."

Although creative writing poses its own challenges, researchers who dive into it say that it makes their life, including their work, more rewarding and diverse. "My science-fiction writing and my research continue to inform each other," says Benford. "To me, it's absolutely essential to life balance that I have writing on the side." ■

Susan Moran is a freelance writer in Boulder, Colorado.