

## EnCorps Provides Teaching Path for Seasoned STEM Workers

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Sometimes change is required to re-energize and spark a stalled or lack-luster career. For some in the life science industries that can mean stepping out of the laboratory and stepping into the most unlikely place of all - a classroom. But how? That's where EnCorps can help.

California-based EnCorps is a program that was developed to address declining student achievement in STEM (science, technology, engineering and math) curriculum. The program looks to bolster STEM teaching in high needs schools in some of California's most populous areas, including Los Angeles, San Diego, Sacramento, San Francisco and in parts of Orange County. Due in part to a teacher shortage in California, EnCorps provides a teaching opportunity to people who are already serving in STEM roles in various industries, including biopharma.

"STEM professionals are uniquely positioned to bring what they know and utilize their talent as excellent STEM teachers," EnCorps Executive Director Katherine Wilcox told BioSpace in an exclusive interview. "They can deliver the education to the students that need it the most."

According to Wilcox, EnCorps empowers STEM professionals to transform public education in high need communities. Professionals, on average 45 to 50 years old, who want to transition from their current roles into the classroom need to have a desire to expand student achievement across the communities in which they serve.

When looking for a potential EnCorps teaching ambassador Wilcox said they look not only at breadth of knowledge in a potential teacher but also for “grit and resilience.”

“It goes beyond wanting to take the knowledge they have, they have to have a desire to recognize the potential of all students and commit to exploring teaching as a career with the recognition that all children can learn,” Wilcox said. “We want to empower the STEM professionals to serve the kids who haven’t been given as many opportunities. Those are the ones they will serve.”

EnCorps teachers are unique in that they are not only experts in their STEM field, but they are also beginners in the field of teaching. As those experts’ transition into becoming teachers, Wilcox said, it’s important for those former STEM workers to fully identify themselves as teachers, as opposed to the roles they previously held.

“That change in identity is important to students. The kids are being taught math and science by people who don’t have any real teaching experience. But, who better to teach math and science than those who have been mathematicians and scientists?”

Since the launch of EnCorps in 2007, Wilcox said more than 800 teaching fellows have come into the program after a careful vetting process. That number represents about 20 percent of all the applicants, she added.

The STEM professionals who are accepted into the EnCorps program go through a teacher certification program. However, according to Wilcox, as part of the process about half of those who begin the program realize teaching is not for them after some experience in the classroom. After EnCorps Fellows complete the certification and begin working in the schools, Wilcox said they have an 88 percent teacher retention rate over 6-10 years.

Last year the program selected about 200 Fellows and Wilcox projects EnCorps is on track to match that number this year.

For those STEM professionals looking to make the transition into a new career, Wilcox said there are several keys to consider:

- Sharing knowledge has an exponential impact on students
- Fellows can impact hundreds of students annually
- The understanding that one of the students they teach could go on to discover a cure for disease or develop an algorithm that benefits humanity

STEM professionals may be experts in their field, but they may not know how to relate that information to a classroom of teen students. Wilcox said that is a “big part” of the professional development that EnCorps provides.

Once a STEM professional transitions to a classroom, Wilcox said EnCorps is still there to provide support. One support method that has proven to be beneficial to the professionals is a social-safety net. Because the EnCorps teaching fellows are in a unique position, the organization provides events to allow the fellows to socialize and support with others who have similar experiences.

While EnCorps has found success in tapping into experiences from STEM professionals, Wilcox went on to explain that the organization is working on an initiative to bring early career

post-doc scientists into K-12 teaching, adding that this group, is underemployed in the state of California. EnCorps would like to offer the opportunity to help them realize that teaching K-12 may be the most rewarding career for them.

Source: <https://www.biospace.com/article/encorps-provides-teaching-path-for-seasoned-stem-workers/>