

Adapting supplemental instruction to PharmD programs

ACADEMIC LEADERSHIP

This fall, as second-year PharmD candidates at the California Northstate University College of Pharmacy (CNUCOP), we were chosen to be student leaders for a modified supplemental instruction (SI) program called CNUCOP SI (or CSI). We provided CSI for the first-year PharmD course Cell and Molecular Biology and Biochemistry, and we have both personally benefitted from the experience.

SI is a student-led academic assistance program offered at many colleges and universities. Originally developed in the 1970s at the University of Missouri–Kansas City, it has expanded widely across U.S. institutions. Typically, SI is offered for high-stakes, large enrollment, science and math courses. SI is a form of pre-remediation academic assistance where SI leaders hold regularly scheduled sessions using problem sets they develop themselves. SI leaders actively engage students with the course material to promote durable learning.

Recently, SI has been adapted for PharmD education and is now offered at several colleges and schools of pharmacy. As PharmD CSI leaders, we develop concept reviews, run regularly scheduled CSI sessions, and hold office hours. Sessions are open to all students in hopes of avoiding remediation for P1s as they transition to a rigorous PharmD curriculum. Our sessions have consistent turnout, demonstrating strong student support. Being CSI leaders has been a positive academic and leadership experience.

Britney Satow: Teaching students and patients

My CSI experience benefits my academic pharmacy career. I solidified my understanding of molecular biology and biochemistry and developed skills I will use as a pharmacist. CSI also has aided my communication, presentation, and teamwork skills. The communication skills I have gained as a CSI leader have directly benefited my patient consultations. During CSI sessions, I encounter students with various learning styles and levels of understanding. Each encounter is an opportunity to develop a new way to convey a concept, just as occurs in patient counseling.

In-class presentations are common requirements for PharmD students, but presenting in a formal teaching scenario is an entirely different experience. At first, it was intimidating to hold the attention of a large class throughout a 2-hour session, but over time, presenting became more comfortable. CSI has helped me develop a personal pace, strong presentation skills, and a more relaxed demeanor in front of a large group. CSI has also been another outlet for developing

teamwork. As a team, Christina and I demonstrate how to use each other's strengths to work effectively and provide the first-year students with a positive example of teamwork.

The connection between teaching and pharmacy is vital, yet it often is untapped by students. Gaining individual knowledge is one facet of the learning process, but to assist others in learning is a true test of comprehension. CSI has taught, and continues to demonstrate, this certainty and is an invaluable experience I highly recommend.

Christina Stephenson: From CSI student to leader

I was first introduced to SI as an undergraduate when SI was offered for large chemistry and math classes. Each SI session provided a smaller, more interactive setting, which complemented the traditional lectures. I realized that I learned best by working through concepts actively. Currently, I feel my success is largely due to our program's commitment to changing traditional teaching norms and promoting an active learning process with programs such as CSI. As a first-year student, I attended the majority of CSI sessions. Later, I would review the CSI worksheets to test my progress and identify areas of weakness.

Over the past year, I transitioned from being a student attending CSI to a CSI leader. Just as I anticipated, the transition was a learning experience. Everyone has their own personal way of learning, but it is not until you have a class of 100 students that you realize how hard it is to pinpoint what exactly you could do to help each of them individually succeed. From this experience, I have learned that translating the pictures you have in your head to another student is much easier said than done, you can't always answer every question, and that finding the right balance between the zoomed-in details and the overall big picture is something that will always change with your audience.

Overall, the experience has made me more conscious of the way I communicate my knowledge, and because of this, I believe it has made me a better student, teacher, and doctoral candidate.

We both encourage PharmD students interested in gaining academic leadership experience to consider adapting SI to your own program!



Britney Satow and **Christina Stephenson** are second-year PharmD candidates at the California Northstate University College of Pharmacy.