Tiny machines in bacteria could help make new medicines
1 April 2022, by Erin Matthews

"CLS has allowed us to get a really high-resolution diffraction of our NRPS crystals," Fortinez said. "This high resolution is really integral for allowing us to answer questions and better understand the NRPS."

The team analyzed an NRPS found in many bacteria that helps generate a chemical that kills algae. In the process, Fortinez and Schmeing discovered that a separate enzyme is responsible for a crucial stage in the production of this algae-killing compound.

"The NRPS machines that the team studied could help to develop new therapeutics and the algae-killing compound might be modified to kill bacteria that threaten our health. The researchers are hopeful that the detailed data they collected will help to lead the way.

"The CLS is a wonderful national resource that we are deeply indebted to and it's a really important resource to keep Canadian science doing as well as we are doing," Schmeing said.
