

Science On Tap: Cryo-electron microscopy

November 3, 2017

Above: Composite image of beta-galactosidase showing how cryo-EM's resolution has improved dramatically in recent years. Older images to the left, more recent to the right.
Credit: Veronica Falconieri, Subramaniam Lab, National Cancer Institute

People say “seeing is believing.” But seeing can also advance knowledge, so seeing is understanding. That concept was honored this year by the Nobel Prize committee when it awarded the 2017 prize for chemistry to three scientists who developed a technique for seeing, and therefore understanding, biomolecules in greater detail than ever before. The three scientists (one from Columbia University in the United States) developed cryo-electron microscopy, which “sees” biomolecules at the atomic level and in three dimensions. By using it, scientists can see biomolecules at the atomic level and in three dimensions with detail that, until a few years ago, was impossible.

The importance of cryo-electron microscopy will be the subject of a talk by Karissa Sanbonmatsu, of the Lab's Theoretical Biology and Biophysics group. Karissa will explain how this technique is being applied to help solve important questions in biology. Join us at 5:30 p.m., Thursday, November 16, at UnQuarked in Los Alamos and learn about what it takes to garner a Nobel Prize.

You can read the Nobel Prize news release [here](#).

The American Chemical Society, Central New Mexico Local Section, will provide light refreshments.

Science on Tap is a convivial opportunity to engage with Lab scientists on their current projects. A brief presentation is followed by lively questions, answers, and discussion. The fun takes place on the third Thursday of each month from 5:30 to 7 p.m. at the UnQuarked Wine Room at 145 Central Park Plaza in Los Alamos.

The sessions are a joint project between the Bradbury Science Museum and the [Los Alamos Creative District](#).

