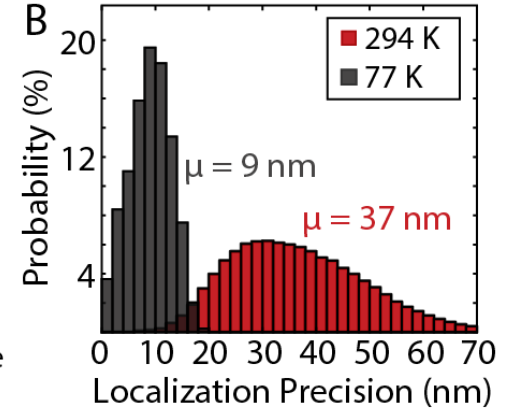
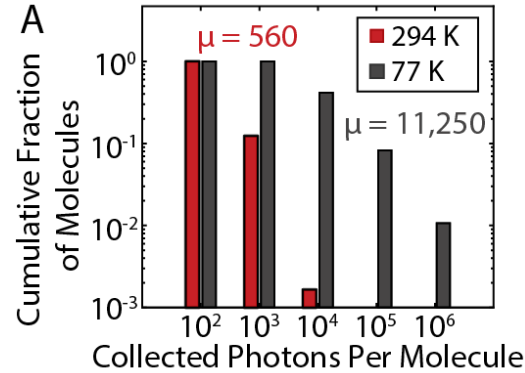


A Red Photoactivatable Fluorescent Protein for Cryogenic Super-Resolution Imaging



Motivation: Cryogenic super-resolution provides enhanced localization precision due to reduced photobleaching rates, a chemical free and rapid fixation method, and the possibility of correlation to cryogenic electron microscopy to specifically label structures of interest.

Result: PAmKate is a useful re-emitting fluorescent protein that can be activated at 77K for SR imaging.



Key Aspects:

- Cells imaged in vitreous ice
- Optical intensity <math>< 100\text{W}/\text{cm}^2</math>
- essential to avoid devitrification

