

A Day in the Lab with...

Name: Ms. Marguerite McDonald

Title: Biochemist, grad student

Concentration: Enzymology

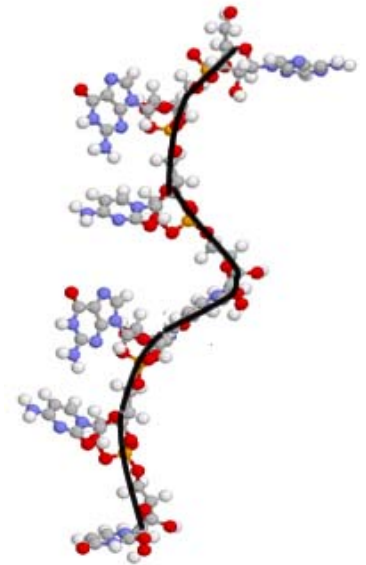
Work Place :

Dr. Mueller's

Mechanistic Enzymology Lab

Chemistry and Biochemistry Department

University of Delaware Graduate Program



Biochemistry

The Central Dogma

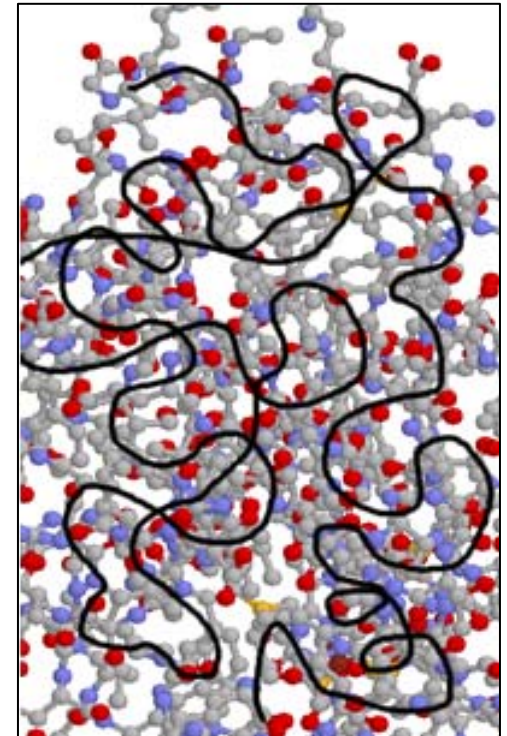
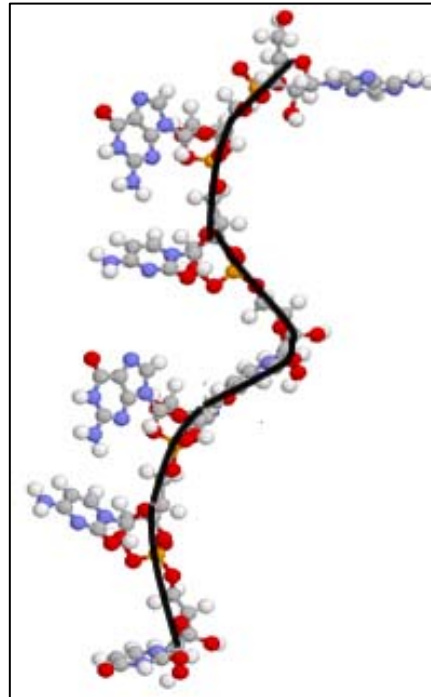
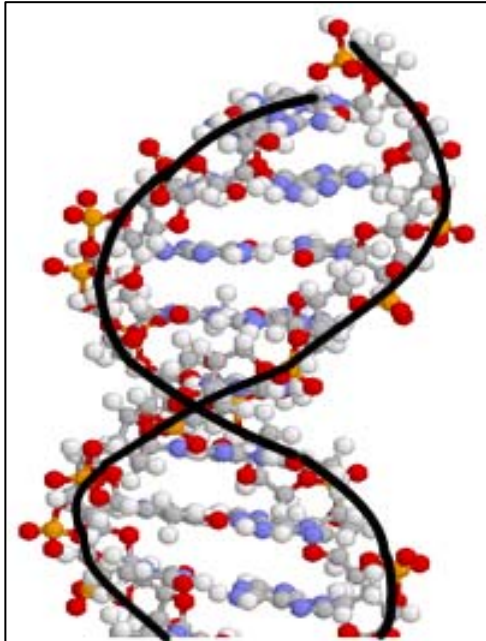
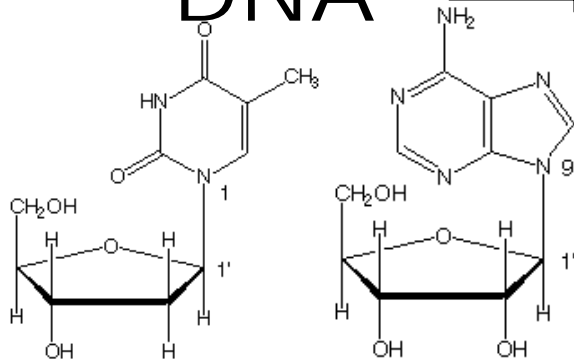
DNA



RNA

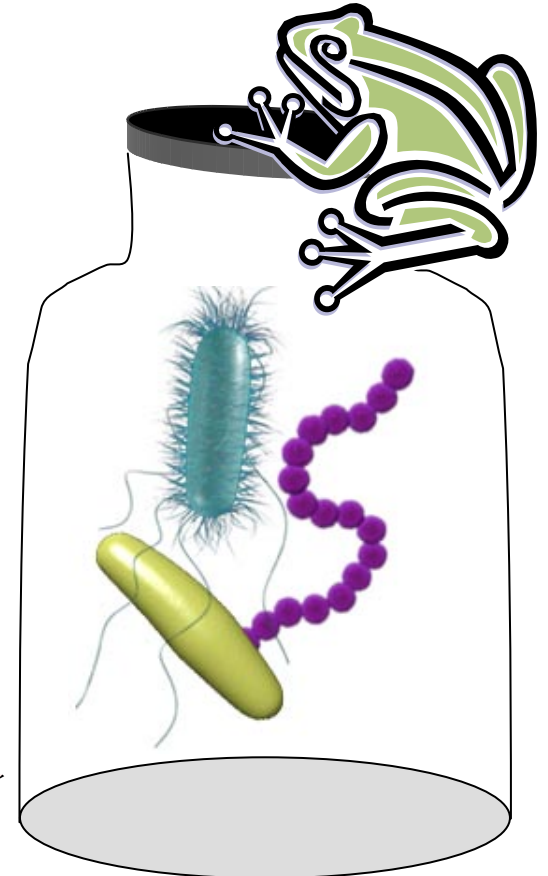
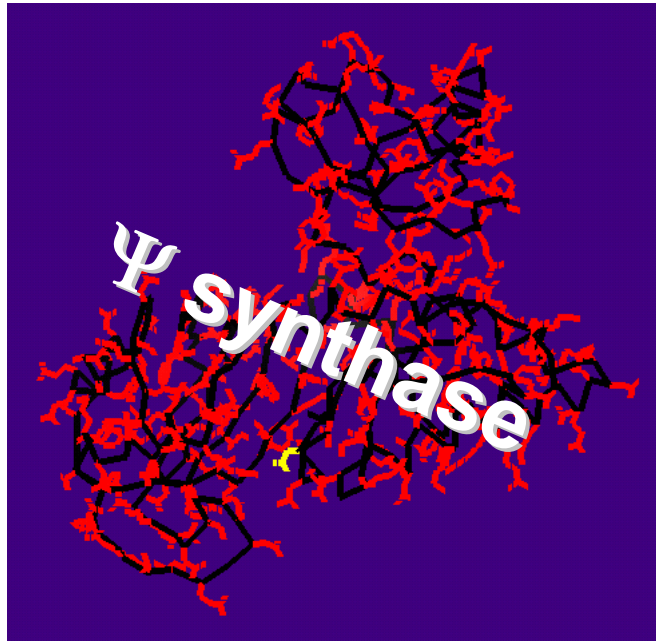


PROTEIN



Mechanistic Enzymology

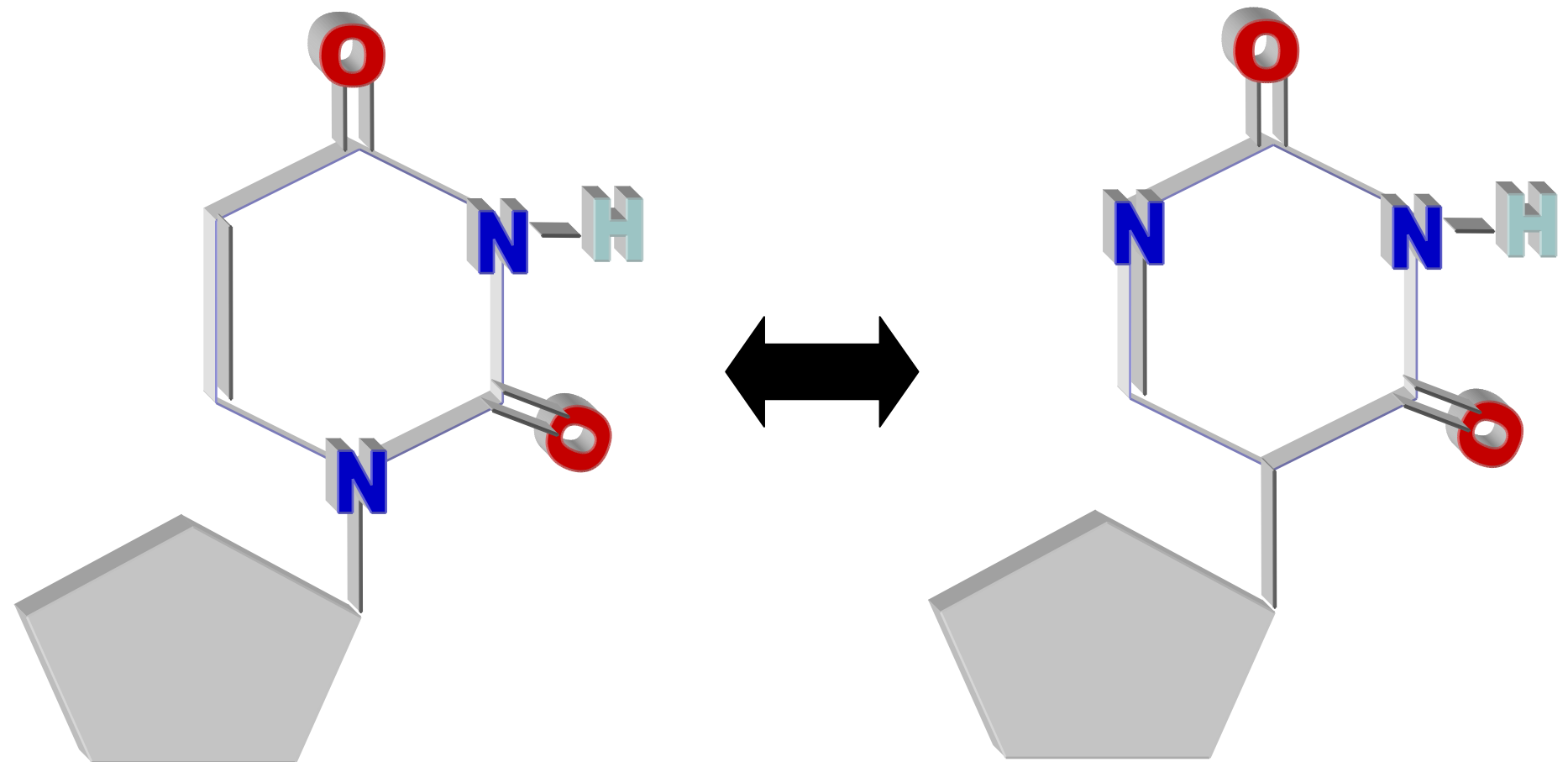
The study of the action (the mechanism) of an enzyme



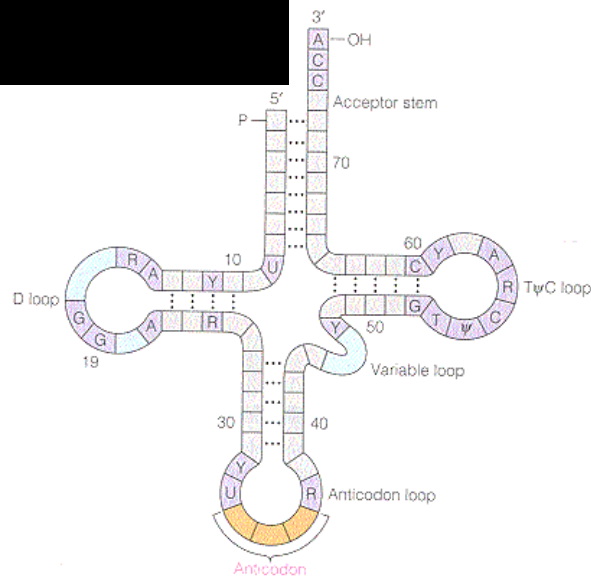
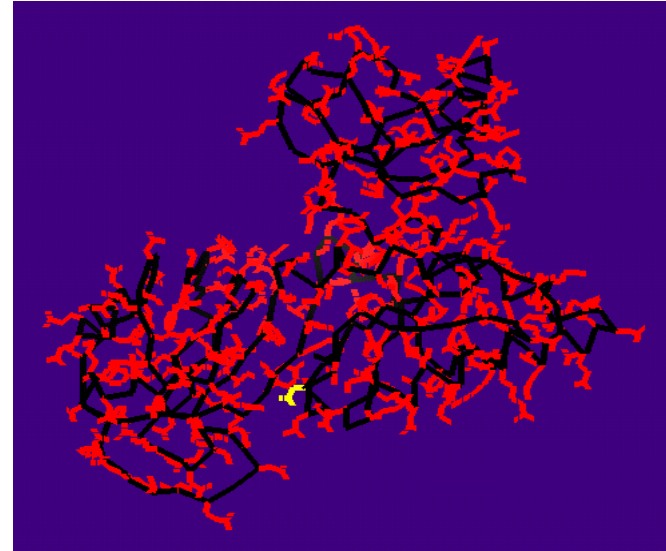
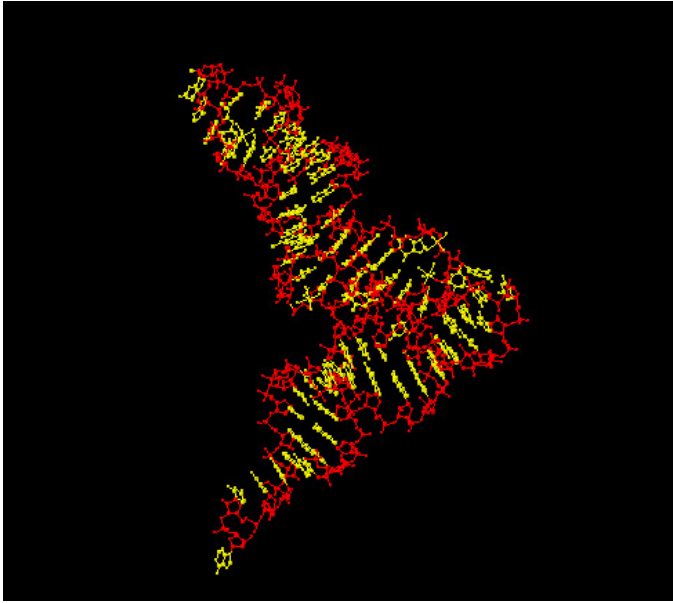
Pseudouridine synthases



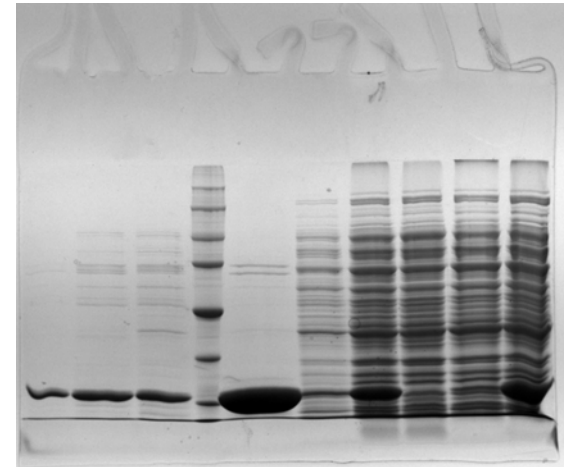
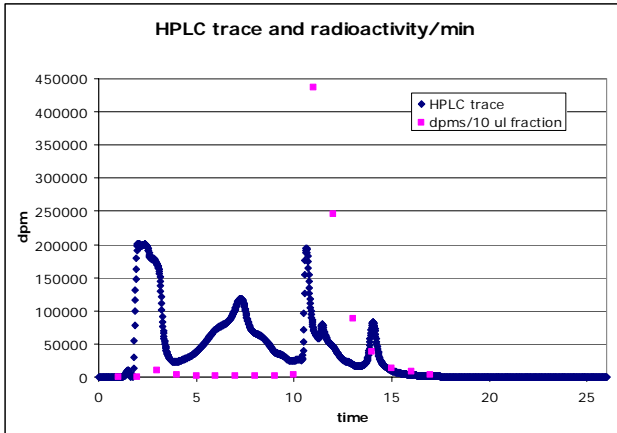
The Chemistry: Isomerization of RNA



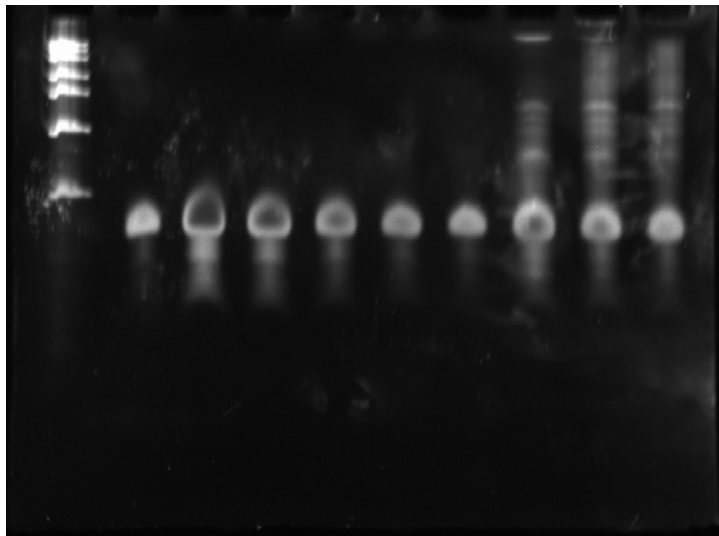
TruA's substrate: transfer RNA



Purifying radioactive tRNA and TruA



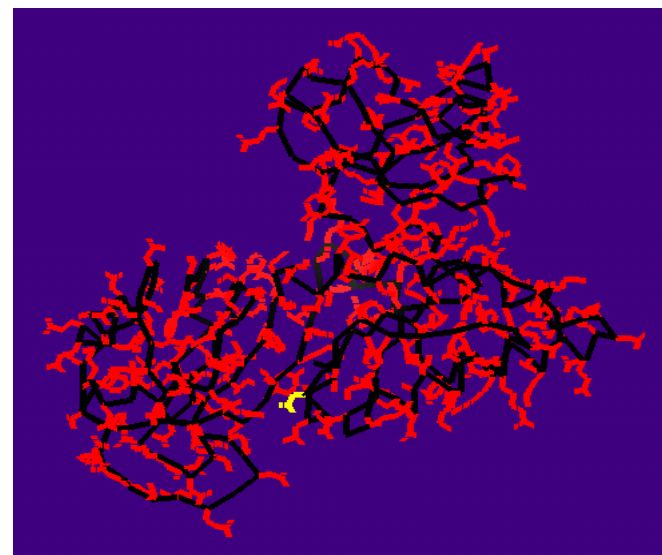
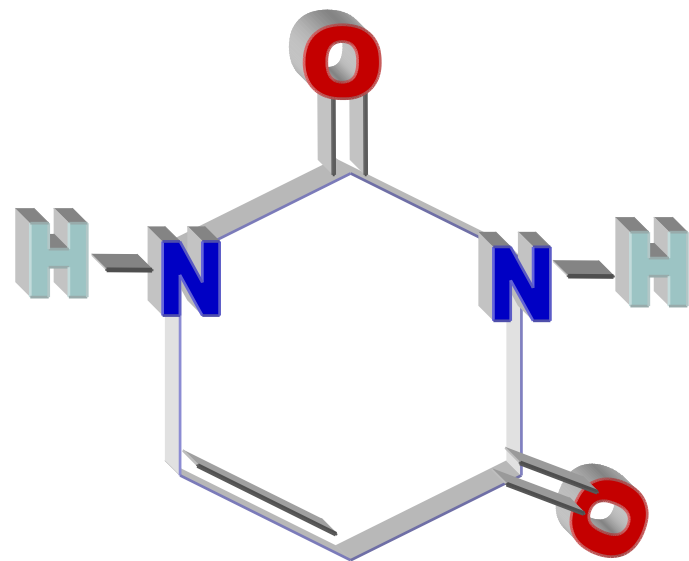
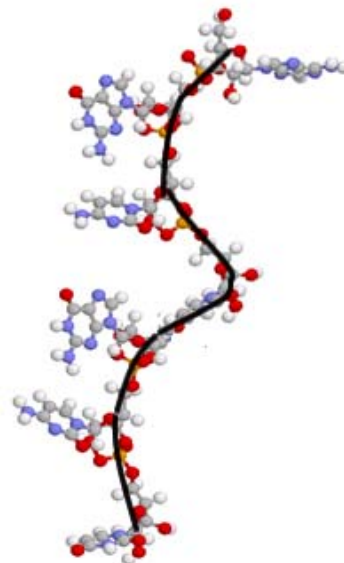
SDS-polyacrylamide gel showing pure TruA and TruA before purification

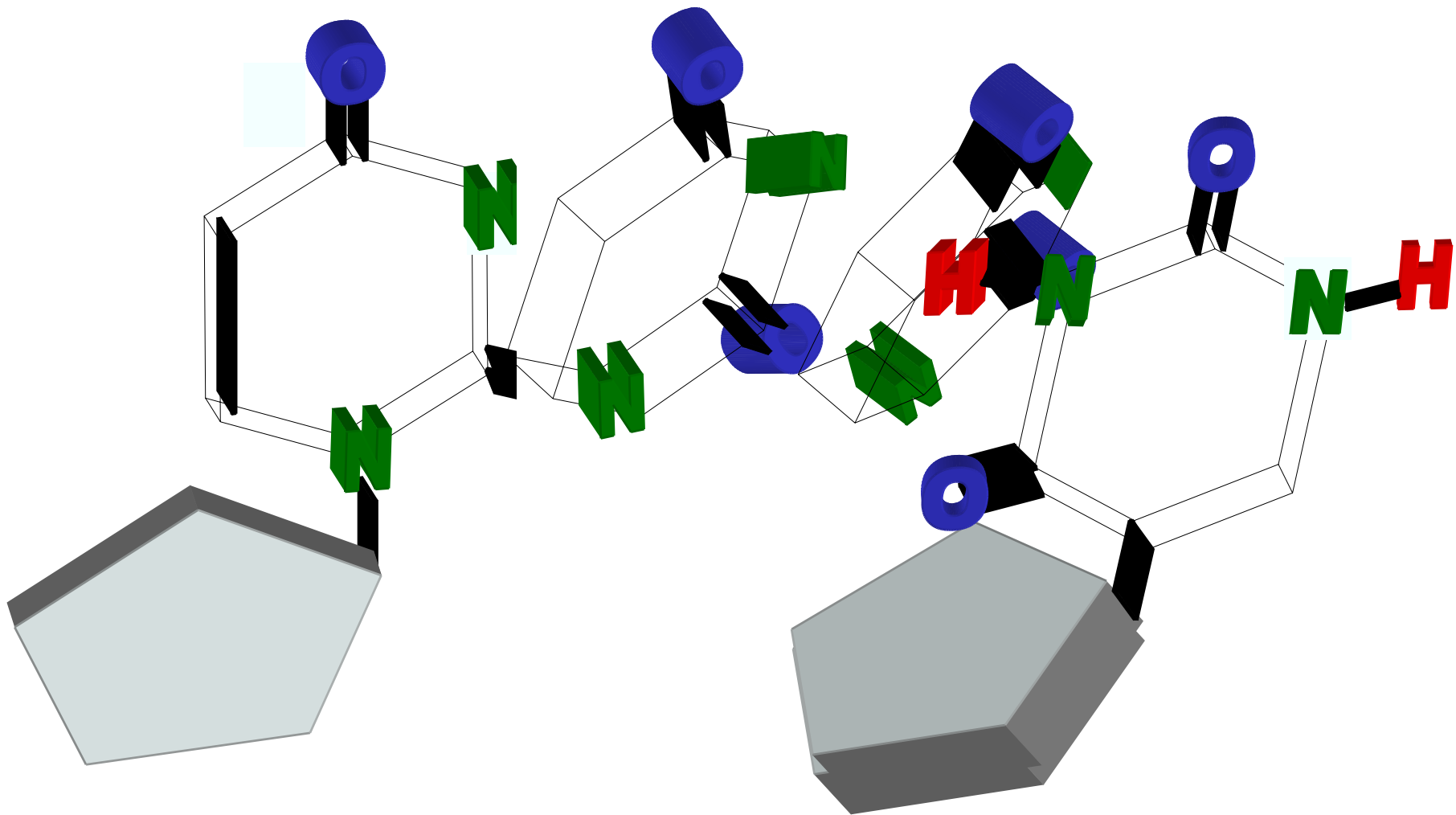


urea-polyacrylamide gel showing pure tRNA and tRNA with DNA contamination



Questions?





Pseudouridine Synthases

