



## The Chemistry Department invites <u>first-time research</u> <u>students</u> to be a Research Apprentice in this semester!

Many faculty in the Chemistry Department have continuing research projects in which we involve students. Conducting research can be the most valuable and enjoyable part of your chemistry education – you actually do work that no one in the world has done before! The Chemistry Department is extending this offer to any student who would be conducting research for the first time!

As a research apprentice, you would . . .

- work individually with a chemistry faculty member on original research!
- learn about advanced lab techniques and equipment used in research projects!
- earn a \$250 stipend after completing a 24-hour apprenticeship
- In the future, have opportunities to do research for course credit or summer employment (depending on the project and available funding)!

### See a list of available research projects and faculty members on the next sheet

Contact Dr. Exstrom for more information or if you have questions. Let him or your instructor know by **Thursday, February 3** if you are interested joining the Research Apprentice Program.

#### Dr. Christopher Exstrom, 217 Bruner Hall, 865-8565, exstromc@unk.edu

# Chemistry Research Apprentice Program – Spring 2022 Available Faculty Mentors and Research Projects

#### Dr. Haishi Cao (411D BHS, <u>caoh1@unk.edu</u>)

• Visualization of bio-important molecules and events *via* a fluorescence approach

# Drs. Scott Darveau (216 BHS, <u>darveausa@unk.edu</u>) & Christopher Exstrom (217 BHS, <u>exstromc@unk.edu</u>)

- Analysis of cement and corn stover ash for concrete durability studies
- Properties of femtosecond laser surface processed metals

#### Dr. Kristy Kounovsky-Shafer (411E BHS, kounovskykl@unk.edu)

• How can we extract DNA from cells and keep the DNA intact? Using 3D printers, we design devices to concentrate really large DNA molecules.

#### Dr. Hector Palencia (409B BHS, palenciah2@unk.edu)

• Total synthesis of molecules with biological activity

#### Dr. Allen Thomas (405C BHS, thomasaa@unk.edu)

• Molecules for treating circadian rhythm disorders.