



Applications from highly qualified candidates are invited for postdoctoral positions in my lab at the University of South Alabama in Mobile, AL. There are several NIH-funded projects: One is an ongoing project to elucidate molecular mechanism underpinning the cephalosporin resistance of *Neisseria gonorrhoeae* conferred by mutated penicillin-binding protein 2 (PBP2). Another is a structure/function analysis of PlzA, a cyclic-di-GMP binding protein from the Lyme disease spirochete, *Borrelia burgdorferi*, to understand its biological roles in the enzootic cycle of the pathogen. Finally, there is a project to develop a lead compound against familial hypercholesterolemia.

Projects entail site-directed mutagenesis, cloning, purification and crystallization of proteins, collecting diffraction data, solving structures by X-ray crystallography, and various biophysical techniques (ITC, fluorescence spectroscopy). Investigations using cryo-EM are also planned.

**Qualifications:** Candidates should hold a PhD in biochemistry or chemistry, with a strong background in molecular biology, protein crystallography. For the PBP2 project, experience with enzyme kinetics is preferred. Successful candidates will be highly motivated and able to work both independently and collaboratively. Good verbal and written communication skills are essential.

**To apply:** Please send cover letter and CV directly to me by email to [cdavies@southalabama.edu](mailto:cdavies@southalabama.edu). Informal enquiries by email are welcome.

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