



## Summer Research Program 2024 – Projects

### Project #6

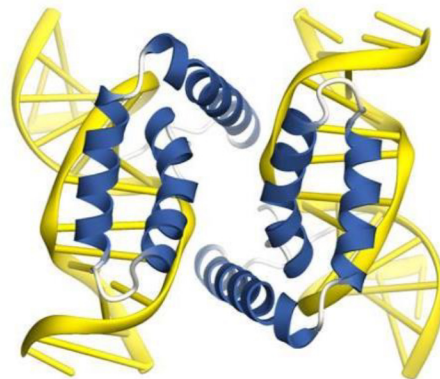
**Title:** Mechanisms of transcription factors involved in pluripotency and  $\beta$  cell development

**Description:** Students will work with recombinant protein production (transcription factors) involved in stem cell pluripotency pathways as well as B cell development. The protein will be used for various protein-protein and protein-DNA interaction assays such as EMSA and ITC to find binding and thermodynamic parameters. Finally, protein crystallization and X-ray crystallography will also be used to find a high-resolution three-dimensional structure.

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Sox crystals.



Structure of Sox17 bound to DNA