

# Biophysics Internship Topics

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**50**  
Active Categories

**5**  
Focused Areas

**Internships**  
Internships

## Biophysics Internship Categories

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| <b>AI Single-Molecule Biophysics Research</b><br><a href="https://internships.nthrys.com/biophysics/ai-single-molecule-biophysics-research">https://internships.nthrys.com/biophysics/ai-single-molecule-biophysics-research</a>                                                   | <b>Machine Learning for Membrane Biophysics</b><br><a href="https://internships.nthrys.com/biophysics/machine-learning-membrane-biophysics">https://internships.nthrys.com/biophysics/machine-learning-membrane-biophysics</a>                                                            |
| <b>AI Protein Folding Biophysics Research</b><br><a href="https://internships.nthrys.com/biophysics/ai-protein-folding-biophysics-research">https://internships.nthrys.com/biophysics/ai-protein-folding-biophysics-research</a>                                                   | <b>AI Mechanobiology &amp; Cell Mechanics Research</b><br><a href="https://internships.nthrys.com/biophysics/ai-mechanobiology-cell-mechanics-research">https://internships.nthrys.com/biophysics/ai-mechanobiology-cell-mechanics-research</a>                                           |
| <b>AI Biophysical Imaging Research</b><br><a href="https://internships.nthrys.com/biophysics/ai-biophysical-imaging-research">https://internships.nthrys.com/biophysics/ai-biophysical-imaging-research</a>                                                                        | <b>AI Molecular Motor Biophysics Research</b><br><a href="https://internships.nthrys.com/biophysics/ai-molecular-motor-biophysics-research">https://internships.nthrys.com/biophysics/ai-molecular-motor-biophysics-research</a>                                                          |
| <b>AI Photobiophysics &amp; Energy Transfer Research</b><br><a href="https://internships.nthrys.com/biophysics/ai-photobiophysics-energy-transfer-research">https://internships.nthrys.com/biophysics/ai-photobiophysics-energy-transfer-research</a>                              | <b>AI Ion Channel Biophysics Research</b><br><a href="https://internships.nthrys.com/biophysics/ai-ion-channel-biophysics-research">https://internships.nthrys.com/biophysics/ai-ion-channel-biophysics-research</a>                                                                      |
| <b>AI Cryo-EM Biophysics Research</b><br><a href="https://internships.nthrys.com/biophysics/ai-cryo-em-biophysics-research">https://internships.nthrys.com/biophysics/ai-cryo-em-biophysics-research</a>                                                                           | <b>AI DNA Biophysics &amp; Chromatin Research</b><br><a href="https://internships.nthrys.com/biophysics/ai-dna-biophysics-chromatin-research">https://internships.nthrys.com/biophysics/ai-dna-biophysics-chromatin-research</a>                                                          |
| <b>Fluorescence Spectroscopy Protein Dynamics</b><br><a href="https://internships.nthrys.com/biophysics/fluorescence-spectroscopy-protein-dynamics">https://internships.nthrys.com/biophysics/fluorescence-spectroscopy-protein-dynamics</a>                                       | <b>Atomic Force Microscopy Biomolecule Mechanics</b><br><a href="https://internships.nthrys.com/biophysics/atomic-force-microscopy-biomolecule-mechanics">https://internships.nthrys.com/biophysics/atomic-force-microscopy-biomolecule-mechanics</a>                                     |
| <b>Surface Plasmon Resonance Binding Studies</b><br><a href="https://internships.nthrys.com/biophysics/surface-plasmon-resonance-binding-studies">https://internships.nthrys.com/biophysics/surface-plasmon-resonance-binding-studies</a>                                          | <b>Circular Dichroism Protein Secondary Structure</b><br><a href="https://internships.nthrys.com/biophysics/circular-dichroism-protein-secondary-structure">https://internships.nthrys.com/biophysics/circular-dichroism-protein-secondary-structure</a>                                  |
| <b>X-ray Crystallography Structure Determination</b><br><a href="https://internships.nthrys.com/biophysics/x-ray-crystallography-structure-determination">https://internships.nthrys.com/biophysics/x-ray-crystallography-structure-determination</a>                              | <b>Differential Scanning Calorimetry Thermodynamics</b><br><a href="https://internships.nthrys.com/biophysics/differential-scanning-calorimetry-thermodynamics">https://internships.nthrys.com/biophysics/differential-scanning-calorimetry-thermodynamics</a>                            |
| <b>Small-Angle X-ray Scattering Structure Analysis</b><br><a href="https://internships.nthrys.com/biophysics/small-angle-x-ray-scattering-structure-analysis">https://internships.nthrys.com/biophysics/small-angle-x-ray-scattering-structure-analysis</a>                        | <b>Nuclear Magnetic Resonance Spectroscopy Research</b><br><a href="https://internships.nthrys.com/biophysics/nuclear-magnetic-resonance-spectroscopy-research">https://internships.nthrys.com/biophysics/nuclear-magnetic-resonance-spectroscopy-research</a>                            |
| <b>Biomolecular Simulation Molecular Dynamics</b><br><a href="https://internships.nthrys.com/biophysics/biomolecular-simulation-molecular-dynamics">https://internships.nthrys.com/biophysics/biomolecular-simulation-molecular-dynamics</a>                                       | <b>Optical Tweezers Single Molecule Manipulation</b><br><a href="https://internships.nthrys.com/biophysics/optical-tweezers-single-molecule-manipulation">https://internships.nthrys.com/biophysics/optical-tweezers-single-molecule-manipulation</a>                                     |
| <b>Electron Paramagnetic Resonance Spin Dynamics</b><br><a href="https://internships.nthrys.com/biophysics/electron-paramagnetic-resonance-spin-dynamics">https://internships.nthrys.com/biophysics/electron-paramagnetic-resonance-spin-dynamics</a>                              | <b>Biolayer Interferometry Real-time Binding Kinetics</b><br><a href="https://internships.nthrys.com/biophysics/biolayer-interferometry-real-time-binding-kinetics">https://internships.nthrys.com/biophysics/biolayer-interferometry-real-time-binding-kinetics</a>                      |
| <b>Two-Photon Microscopy Live Cell Imaging</b><br><a href="https://internships.nthrys.com/biophysics/two-photon-microscopy-live-cell-imaging">https://internships.nthrys.com/biophysics/two-photon-microscopy-live-cell-imaging</a>                                                | <b>Raman Spectroscopy Molecular Vibrational Analysis</b><br><a href="https://internships.nthrys.com/biophysics/raman-spectroscopy-molecular-vibrational-analysis">https://internships.nthrys.com/biophysics/raman-spectroscopy-molecular-vibrational-analysis</a>                         |
| <b>Isothermal Titration Calorimetry Thermodynamic Binding</b><br><a href="https://internships.nthrys.com/biophysics/isothermal-titration-calorimetry-thermodynamic-binding">https://internships.nthrys.com/biophysics/isothermal-titration-calorimetry-thermodynamic-binding</a>   | <b>Neutron Diffraction Structural Biology Research</b><br><a href="https://internships.nthrys.com/biophysics/neutron-diffraction-structural-biology-research">https://internships.nthrys.com/biophysics/neutron-diffraction-structural-biology-research</a>                               |
| <b>Gel Electrophoresis Protein Characterization Studies</b><br><a href="https://internships.nthrys.com/biophysics/gel-electrophoresis-protein-characterization-studies">https://internships.nthrys.com/biophysics/gel-electrophoresis-protein-characterization-studies</a>         | <b>Total Internal Reflection Fluorescence Microscopy</b><br><a href="https://internships.nthrys.com/biophysics/total-internal-reflection-fluorescence-microscopy">https://internships.nthrys.com/biophysics/total-internal-reflection-fluorescence-microscopy</a>                         |
| <b>Patch-Clamp Electrophysiology Ion Channel Recording</b><br><a href="https://internships.nthrys.com/biophysics/patch-clamp-electrophysiology-ion-channel-recording">https://internships.nthrys.com/biophysics/patch-clamp-electrophysiology-ion-channel-recording</a>            | <b>Hydrogen-Deuterium Exchange Mass Spectrometry</b><br><a href="https://internships.nthrys.com/biophysics/hydrogen-deuterium-exchange-mass-spectrometry">https://internships.nthrys.com/biophysics/hydrogen-deuterium-exchange-mass-spectrometry</a>                                     |
| <b>Native Mass Spectrometry Protein Complex Analysis</b><br><a href="https://internships.nthrys.com/biophysics/native-mass-spectrometry-protein-complex-analysis">https://internships.nthrys.com/biophysics/native-mass-spectrometry-protein-complex-analysis</a>                  | <b>Bimolecular Fluorescence Complementation Cellular Imaging</b><br><a href="https://internships.nthrys.com/biophysics/bimolecular-fluorescence-complementation-cellular-imaging">https://internships.nthrys.com/biophysics/bimolecular-fluorescence-complementation-cellular-imaging</a> |
| <b>Thermal Shift Assay Protein Stability Screening</b><br><a href="https://internships.nthrys.com/biophysics/thermal-shift-assay-protein-stability-screening">https://internships.nthrys.com/biophysics/thermal-shift-assay-protein-stability-screening</a>                        | <b>Field-Flow Fractionation Biomolecule Separation</b><br><a href="https://internships.nthrys.com/biophysics/field-flow-fractionation-biomolecule-separation">https://internships.nthrys.com/biophysics/field-flow-fractionation-biomolecule-separation</a>                               |
| <b>Förster Resonance Energy Transfer Structural Distances</b><br><a href="https://internships.nthrys.com/biophysics/foerster-resonance-energy-transfer-structural-distances">https://internships.nthrys.com/biophysics/foerster-resonance-energy-transfer-structural-distances</a> | <b>Stopped-Flow Kinetics Rapid Reaction Analysis</b><br><a href="https://internships.nthrys.com/biophysics/stopped-flow-kinetics-rapid-reaction-analysis">https://internships.nthrys.com/biophysics/stopped-flow-kinetics-rapid-reaction-analysis</a>                                     |

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| <b>Scanning Electron Microscopy Biomaterial Surface Characterization</b><br><a href="https://internships.nthrys.com/biophysics/scanning-electron-microscopy-biomaterial-surface-characterization">https://internships.nthrys.com/biophysics/scanning-electron-microscopy-biomaterial-surface-characterization</a> | <b>Electrophoretic Light Scattering Zeta Potential Measurements</b><br><a href="https://internships.nthrys.com/biophysics/electrophoretic-light-scattering-zeta-potential-measurements">https://internships.nthrys.com/biophysics/electrophoretic-light-scattering-zeta-potential-measurements</a> |
| <b>Quartz Crystal Microbalance Surface Binding Dynamics</b><br><a href="https://internships.nthrys.com/biophysics/quartz-crystal-microbalance-surface-binding-dynamics">https://internships.nthrys.com/biophysics/quartz-crystal-microbalance-surface-binding-dynamics</a>                                        | <b>Confocal Laser Scanning Microscopy 3D Reconstruction</b><br><a href="https://internships.nthrys.com/biophysics/confocal-laser-scanning-microscopy-3d-reconstruction">https://internships.nthrys.com/biophysics/confocal-laser-scanning-microscopy-3d-reconstruction</a>                         |
| <b>Density Functional Theory Protein Modeling</b><br><a href="https://internships.nthrys.com/biophysics/density-functional-theory-protein-modeling">https://internships.nthrys.com/biophysics/density-functional-theory-protein-modeling</a>                                                                      | <b>Size Exclusion Chromatography Protein Characterization</b><br><a href="https://internships.nthrys.com/biophysics/size-exclusion-chromatography-protein-characterization">https://internships.nthrys.com/biophysics/size-exclusion-chromatography-protein-characterization</a>                   |
| <b>Anisotropy Fluorescence Polarization Binding Assay</b><br><a href="https://internships.nthrys.com/biophysics/anisotropy-fluorescence-polarization-binding-assay">https://internships.nthrys.com/biophysics/anisotropy-fluorescence-polarization-binding-assay</a>                                              | <b>Ultraviolet-Visible Spectroscopy Protein Characterization</b><br><a href="https://internships.nthrys.com/biophysics/ultraviolet-visible-spectroscopy-protein-characterization">https://internships.nthrys.com/biophysics/ultraviolet-visible-spectroscopy-protein-characterization</a>          |
| <b>Coherent Anti-Stokes Raman Scattering Microscopy</b><br><a href="https://internships.nthrys.com/biophysics/coherent-anti-stokes-raman-scattering-microscopy">https://internships.nthrys.com/biophysics/coherent-anti-stokes-raman-scattering-microscopy</a>                                                    | <b>Analytical Ultracentrifugation Sedimentation Analysis</b><br><a href="https://internships.nthrys.com/biophysics/analytical-ultracentrifugation-sedimentation-analysis">https://internships.nthrys.com/biophysics/analytical-ultracentrifugation-sedimentation-analysis</a>                      |
| <b>Förster Resonance Energy Transfer Microscopy Imaging</b><br><a href="https://internships.nthrys.com/biophysics/foerster-resonance-energy-transfer-microscopy-imaging">https://internships.nthrys.com/biophysics/foerster-resonance-energy-transfer-microscopy-imaging</a>                                      | <b>Particle Tracking Analysis Diffusion Measurements</b><br><a href="https://internships.nthrys.com/biophysics/particle-tracking-analysis-diffusion-measurements">https://internships.nthrys.com/biophysics/particle-tracking-analysis-diffusion-measurements</a>                                  |
| <b>Surface Adsorption Kinetics Biophysical Characterization</b><br><a href="https://internships.nthrys.com/biophysics/surface-adsorption-kinetics-biophysical-characterization">https://internships.nthrys.com/biophysics/surface-adsorption-kinetics-biophysical-characterization</a>                            | <b>Optical Rotatory Dispersion Protein Chirality Studies</b><br><a href="https://internships.nthrys.com/biophysics/optical-rotatory-dispersion-protein-chirality-studies">https://internships.nthrys.com/biophysics/optical-rotatory-dispersion-protein-chirality-studies</a>                      |

# Biophysics Internship Topics and Focused Areas

## Ultraviolet-Visible Spectroscopy Protein Characterization

- Protein Secondary Structure Analysis via UV-Vis Spectroscopy
- Aromatic Amino Acid Characterization and Tryptophan Fluorescence
- Protein-Ligand Interaction Studies Using UV-Vis Titration
- Protein Aggregation and Denaturation Monitoring
- Chromophore-Modified Protein Engineering and Characterization

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