

## Aishwarya Prakash, PhD.

Associate Professor of Biochemistry & Molecular Biology

16 H-Index

30 Research Manuscripts

1019 Citations

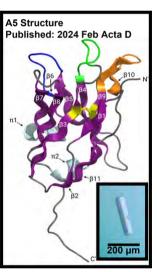
## **Research Interests**

Nuclear and Mitochondrial DNA Base Excision Repair Complexes Lesions in mtDNA
NEIL Enzyme Regulation

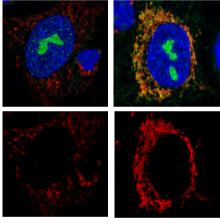
Mutagenesis Lynch Syndrome: Variants of Unknown Significance

## **Experimental Capabilities**

X-Ray Crystallography Cryo-Electron Miroscopy Recombinant Protein Production Fluorescence Micrsocopy

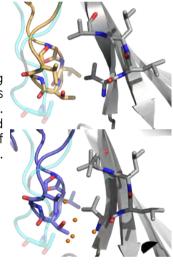


Crystals of an anti-NEIL1 nanbody and the crystal structure of the nanobody alone.



Microscopy studies reveal NEIL localization to the mitochondria for the purposes of mitochondrial DNA repair.

Comparing the structures of oxidized vs. reduced complexes of XRCC1-PolB.



2022

Molecular Genetics & Genomic Medicine
"PMS2 Variant Results in Loss of ATPase Activity

"PMS2 Variant Results in Loss of ATPase Activity Without Compromising Mismatch Repair Molecular"

Structural Biology
"Deciphering the Crystal Structure
of a Novel Nanobody Against the
NEIL1 DNA Glycosylase"

2019

**Molecular Cancer Therapeutics** 

"The Antitumor Drug LB-100 is a Catalytic Inhibitor of PRotein Phosphatase 2A (PPP2CA) and 5 (PPP5C) Coordingating with the Active Site Catalytic Metals in PPP5C"

2022: Fronteirs in Cell and Evelopmental Riology

Developmental Biology
"Novel Interaction Interfaces Mediate
the Interaction Between the NEIL1
Glycosylase and Mitochondrial
Transcription Factor A"



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