

Stanford

David B. McKay

Professor of Structural Biology, Emeritus

Bio

ACADEMIC APPOINTMENTS

- Emeritus Faculty, Acad Council, Structural Biology
- Member, Bio-X

HONORS AND AWARDS

- Fellow, American Association for the Advancement of Science (2001)

PROFESSIONAL EDUCATION

- B.S., California Institute of Technology , Physics
- Ph.D., University of Chicago , Biophysics

LINKS

- McKay Lab Website: <http://mckaylab.stanford.edu>

Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS

See:

<http://alpha1.stanford.edu/~mckaylab>

Publications

PUBLICATIONS

- **Structure and Function of Steroid Receptor RNA Activator Protein, the Proposed Partner of SRA Noncoding RNA** *JOURNAL OF MOLECULAR BIOLOGY*
McKay, D. B., Xi, L., Barthel, K. K., Cech, T. R.
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- **The Bacillus subtilis RNA helicase YxiN is distended in solution.** *Biophysical journal*
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- **The periplasmic bacterial molecular chaperone SurA adapts its structure to bind peptides in different conformations to assert a sequence preference for aromatic residues** *JOURNAL OF MOLECULAR BIOLOGY*
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- **Retention of core catalytic functions by a conserved minimal ribonuclease E peptide that lacks the domain required for tetramer formation** *JOURNAL OF BIOLOGICAL CHEMISTRY*
Caruthers, J. M., Feng, Y., McKay, D. B., Cohen, S. N.
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- **Structure of the *Escherichia coli* FlhDC complex, a prokaryotic heteromeric regulator of transcription** *JOURNAL OF MOLECULAR BIOLOGY*
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- **Binding of phage-display-selected peptides to the periplasmic chaperone protein SurA mimics binding of unfolded outer membrane proteins** *FEBS LETTERS*
Bitto, E., McKay, D. B.
2004; 568 (1-3): 94-98
- **Kinetics of protein substrate degradation by HslUV** *5th International Conference on AAA(plus) Proteins*
Kwon, A. R., Trame, C. B., McKay, D. B.
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- **The periplasmic molecular chaperone protein SurA binds a peptide motif that is characteristic of integral outer membrane proteins** *JOURNAL OF BIOLOGICAL CHEMISTRY*
Bitto, E., McKay, D. B.
2003; 278 (49): 49316-49322
- **Crystal structure of the leadzyme at 1.8 angstrom resolution: Metal ion binding and the implications for catalytic mechanism and allo site ion regulation** *BIOCHEMISTRY*
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 - **Structure of *Haemophilus influenzae* HslU protein in crystals with one-dimensional disorder twinning** *ACTA CRYSTALLOGRAPHICA SECTION D-BIOLOGICAL CRYSTALLOGRAPHY*
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 - **Purification, crystallization, and X-ray diffraction analysis of small ribozymes** *RNA-LIGAND INTERACTIONS PTA*
Wedekind, J. E., McKay, D. B.
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- **THREONINE-204 OF THE CHAPERONE PROTEIN HSC70 INFLUENCES THE STRUCTURE OF THE ACTIVE-SITE, BUT IS NOT ESSENTIAL FOR ATP HYDROLYSIS** *JOURNAL OF BIOLOGICAL CHEMISTRY*
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