

## Fifteen Selected peer-reviewed publications (of 59 total, in chronological order)

1. **McKnight, C.J.**, S.J. Stradley, J.D. Jones, & Gierasch, L.M. (1991) Conformational and membrane-binding properties of a signal sequence are largely unaltered by its adjacent mature region. *Proc. Natl. Acad. Sci. USA*, 77:5799-5803. PMID: 2062859, [PMCID: PMC51965](#)
2. Talanian, R.V., **C.J. McKnight**, & Kim, P.S. (1990) Sequence-specific DNA binding by a short peptide dimer. *Science*, 249:769-771. [PMID: 2389142](#)
3. **McKnight, C.J.**, P.T. Matsudaira, & Kim, P.S. (1997) NMR structure of the 35-residue villin headpiece subdomain. *Nature Structural Biology*, 4: 180-184. <http://www.nature.com/nsmb/journal/v4/n3/abs/nsb0397-180.html>
4. Cordes, M.H.J., Walsh, N.P., **McKnight, C.J.**, & Sauer, R.T. (1999) Evolution of a protein fold *in vitro*. *Science*, 284: 325-327. [PMID: 10195898](#)
5. Cordes, M.H.J., Burton, R.E., Walsh, N.P., **McKnight, C.J.**, & Sauer, R.T. (2000) An evolutionary bridge to a new protein fold: Interconversion of two native structures in a single mutant protein. *Nature Structural Biology*, 7:1129-1132. [PMID: 11101895](#)
6. Jiang, Z., Carraway, M. & **McKnight, C.J.** (2005) Limited proteolysis and biophysical characterization of the lipovitellin homology region in apolipoprotein B, *Biochemistry*, 44, 1163-1173. [PMID: 15667210](#)
7. Meng, J., Vardar, D., Wang, Y., Guo, H.-C., Head, J.F. & **McKnight, C.J.** (2005) The high resolution crystal structures of villin headpiece and mutants with reduced F-actin binding activity. *Biochemistry*, 44, 11963-73. [PMID: 16142894](#)
8. Jiang, Z.G., Gantz, D., Bullitt, E., & **McKnight, C.J.**, (2006) Defining lipid interacting domains in the N-terminal region of apolipoprotein B, *Biochemistry*, 45; 11799-11808. PMID: 17002280, [PMCID: PMC2519233](#)
9. Jiang, Z.G., Simon, M.N., Wall, J.S., & **McKnight, C.J.**, (2007) Structural analysis of reconstituted lipoproteins containing the N-terminal domain of apolipoprotein B, *Biophysical J.*, 92, 4097-4108. PMID: 17369413, [PMCID: PMC1868998](#)
10. Jiang, Z.G, Liu, Y., Hussain, M.M., Atkinson, D. & **McKnight, C.J.** (2008) Reconstituting initial events during the assembly of ApoB-containing lipoproteins in a cell-free system. *J. Mol. Biol.*, 383, 1181-1194. PMID: 18804479, [PMCID: PMC2637522](#)
11. Vugmeyster, L. & **McKnight, C.J.** (2008) Slow motions in chicken villin headpiece subdomain probed by cross-correlated NMR relaxation of amide NH bonds in successive residues. *Biophysical J.*, 95. 5941-50. PMID: 18804479, [PMCID: PMC2599813](#)
12. Mitsche, M., Wang, L., Jiang, Z.G., **McKnight, C.J.** & Small, D.M. (2009) Interfacial properties of a complex multi-domain 490 amino acid peptide derived from apolipoprotein B (residues 292-782). *Langmir*, 25, 2322-2330. [PMID: 19146422](#), PMCID – in process.
13. Wang, L. Jiang, Z.G., **McKnight, C.J.** & Small, D.M. (2010) Interfacial properties of apolipoprotein B292-593 (B6.4-13) and B611-782 (B13-17). Insights into the structure of the lipovitellin homology region in apolipoprotein B. *Biochemistry*, 48, 3898-3907. PMID 20195380, [PMCID PMC2879024](#).

14. Packer, L.E. Song, B., Raleigh, D.P. & **McKnight C.J** (2011), Competition between intradomain and interdomain interactions: a buried salt bridge is essential for villin headpiece folding and actin binding. *Biochemistry*, 50, 3706-3712. PMID: 21449557, [PMCID: PMC3086997](#).
15. Brown, J.W., Farelli, J.D. & **McKnight, C.J.** (2012) On the unyielding hydrophobic core of villin headpiece.. *Protein Science*, 21, 647-654. PMID: 22467489, [PMCID: PMC3403462](#)