Bo Chen

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Education

Jun 2007	Northwestern University, Evanston, IL Ph.D in Physics. Advisor: William. P. Halperin
Jun 2001	Beijing University, Beijing, China B. S. in Physics

Appointments

Aug 2011 - present	University of Central Florida, Orlando, FL Assistant professor
Jun 2008 – Jul 2011	National Institutes of Health, Bethesda, MD Research fellow Advisor: Robert Tycko
Jul 2007 – Jun 2008	National Institutes of Health, Bethesda, MD Visiting fellow Advisor: Robert Tycko

UCF honors and awards

May 2016	UCF	COS Dean's Rising Star Award
May 2012	UCF	InHouse Awards

National Honors and awards

March 2013	AFOSR	Young Investigator Program Award

Representative Publications (at Peer-reviewed Journals, first author and corresponding authors are significant contributors, students in Bo Chen's group are marked with *)

1. Jaekyun Jeon*, Xin Qiao*, Ivan Hung, Alok K. Mitra, Ambroise Desfosses, Daniel Huang*, Peter L. Gor'kov, Rebecca C. Craven, Richard L. Kingston, Zhehong Gan, Fangqiang Zhu, and **Bo Chen.** "Structural model of the tubular assembly of the rous sarcoma virus capsid protein", JACS, in press, DOI: 10.1021/jacs.6b11939.
2. **Bo Chen**. "*HIV capsid assembly, mechanism and structure*". Invited article for Current Topics in Biochemistry, 55(18): 2539-52 (2016).
3. Qiao X*, Jeon J*, Weber J*, Zhu F, and **Bo Chen**. "*Construction of a novel coarse grain model for simulations of HIV capsid assembly to capture the backbone structure and inter-domain motions in solution*". Data in brief, 5:506-512(2015).
4. Xin Zhao*, Jaekyun Jeon*, Jeff Weber*, and **Bo Chen**. "*Mechanism of polymorphism and curvature of HIV capsid assemblies probed by 3D simulations with a novel high resolution coarse grain model"*, BBA-Gen Subjects, 1850(11):2353-67(2015).
5. Fangqiang Zhu, and **Bo Chen**. "*Monte carlo simulations of HIV capsid protein homodimer*." J Chem Inf Model, Jul 27;55(7):1361-8(2015).
6. Jaekyun Jeon*, Xin Qiao*, Amy Cole, Jason O. Matos*, Stephany Bautista* Justin Castillo*, Ivan Hung, Zhehong Gan, Suren A. Tatulian, Alexander M. Cole, and **Bo Chen**. "*Morphology-dependent*

HIV-enhancing effect of semen-derived enhancer of viral infection", Biophysical Journal, 108(8):2028-37(2015).

7. Marvin J Bayro, **Bo Chen**, Wau-Ming Yau and Robert Tycko. *"Site-specific structural and dynamical variations accompanying tubular assembly of the HIV-capsid protein"*, JMB, 426, 1109-1127 (2014).
8. Gongpu Zhao, Juan R. Perilla, Ernest L. Yufenyuy, Xin Meng, **Bo Chen**, Jiying Ning, Jinwoo Ahn, Angela M. Gronenborn, Klaus Schulten, Christopher Aiken, and Peijun Zhang, Nature, 497, 643-646 (2013). *"Mature HIV-1 capsid structure by cryo-electron microscopy and all-atom molecular dynamics"*.
9. Jaekyun Jeon*, Michael S. Lodge, Ben D. Dawson, Masa Ishigami, Frank Shewmaker, and **Bo Chen**, BBA – General Subjects, 1830, 3807-3815 (2013). *"Superb resolution and contrast of transmission electron microscopy images of non-stained biological samples on graphene-coated grids"*.
10. **Bo Chen**, and Robert Tycko, Biophysical Journal, 100, 3035 (2011) *"Simulated self-Assembly of the HIV-1 capsid: protein shape and native contacts are sufficient for two-dimensional lattice formation"*.
11. **Bo Chen**, and Robert Tycko, Protein Science, 19, 716 (2010) *"Structural and dynamical characterization of tubular HIV-1 capsid protein assemblies by solid state nuclear magnetic resonance and electron microscopy"*.
12. **Bo Chen**, Kent R. Thurber, Frank Shewmaker, Reed B. Wickner, and Robert Tycko, Proceedings of the National Academy of Sciences of the United States of America, 106, 14339 (2009) *"Measurement of amyloid fibril mass-per-length by tillted-beam transmission electron microscopy"*.