

Gang DONG

PhD, MS, BA

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Department of Medical Biochemistry
Medical University of Vienna
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Research Experience

Medical University of Vienna, Austria	Group Leader	2008-present
Yale University, New Haven, CT, USA	Associate Research Scientist	2006-2008
Yale University, New Haven, CT, USA	Postdoctoral Fellow	2002-2006
University of Texas at Austin, TX, USA	PhD Student	1998-2002
Peking University, Beijing, China	Master's Student	1995-1998

Education

Ph.D. Biochemistry & Molecular Biology, University of Texas at Austin, USA	2002
M.S. Biophysics, Peking University, Beijing, China	1998
B.A. Plant Pathology, China Agricultural University, Beijing, China	1993

Honors and Awards

Postdoctoral Fellowship, American Heart Association, USA	2004-06
Brown-Coxe Postdoctoral Fellowship, Yale University, CT, USA	2004
Graduate School Summer Fellowship, University of Texas at Austin, TX, USA	1999
Most Persuasive Speaker Award, University of Texas at Austin, TX, USA	1998
Excellent Graduate Student Award, Peking University, Beijing, China	1997
Elected Delegation Member to Japan, China Agricultural University, Beijing	1992
Outstanding Activity Organizer Award, China Agricultural University, Beijing	1991
First-class Undergraduate Scholarship, China Agricultural University, Beijing	1990-93

Publications

1. Lesigang J and Dong G (2016) "Analysis of the three-dimensional structures of exocyst components" *Meth. Mol. Biol.* 1369:191-204. DOI: 10.1007/978-1-4939-3145-3_14.
2. Dong G (2015) "Building a nine-fold symmetrical barrel: structural dissections of centriole assembly" (Review) *Open Biol.* DOI: 10.1098/rsob.150082.
3. Florimond C, Sahin A, Byard EH, Vidilaseris K, Dong G, Albisetti A, Landrein N, Dacheux D, Bonhivers M and Robinson DR (2015) "BILBO1 is a scaffold protein of the flagellar pocket in the pathogen *Trypanosoma brucei*" *PLoS Pathog.* 11(3):e1004654.

4. Vidilaseris K, Lesigang J, Morriswood B, and Dong G (2015) "Assembly mechanism of *Trypanosoma brucei* BILBO1 at the flagellar pocket collar" **Commun. Integr. Biol.** DOI:10.4161/19420889.2014.992739
5. Shimanovskaya E, Viscardi V, Lesigang J, Lettman MM, Qiao R, Svergun DI, Round A, Oegema K, and Dong G (2014) "Structure of the *C. elegans* ZYG-1 cryptic polo box suggests a conserved mechanism for centriolar docking of Plk4 kinases" **Structure** 22(8):1090-104. [Featured article of the Journal]
6. Vidilaseris K, Shimanovskaya E, Esson HJ, Morriswood B, and Dong G (2014) "Assembly mechanism of *Trypanosoma brucei* BILBO1, a multidomain cytoskeletal protein" **J. Biol. Chem.** 289(34): 23870-81.
7. Vidilaseris K, Morriswood B, Kontaxis G, and Dong G (2014) "Structure of the TbBILBO1 N-terminal domain from *Trypanosoma brucei* reveals an essential requirement for a conserved surface patch" **J. Biol. Chem.** 289(6): 3724-35.
8. Sealey-Cardona M, Schmidt K, Demmel L, Hirschmugl T, Gesell T, Dong G, and Warren G (2014) "Sec16 determines the size and functioning of the Golgi in the protist parasite *Trypanosoma brucei*" **Traffic** PMID: 24612401
9. Shimanovskaya E and Dong G (2014) "Expression, purification and preliminary crystallographic analysis of the cryptic polo-box domain of *Caenorhabditis elegans* ZYG-1" **Acta Crystallogr.** F70: 1346-50.
10. Vidilaseris K and Dong G (2014) "Expression, purification and preliminary crystallographic analysis of the N-terminal domain of *Trypanosoma brucei* BILBO1" **Acta Crystallogr.** F70: 628-631.
11. Shimanovskaya E, Qiao R, Lesigang J, and Dong G (2013) "The SAS-5 N-terminal domain is a tetramer, with implications for centriole assembly in *C. elegans*" **Worm** Volume 2, Issue 3, eLocation ID: e25214. PMID: 24778935.
12. Qiao R, Cabral G, Lettman MM, Dammermann A, and Dong G (2012) "SAS-6 coiled coil structure and interaction with SAS-5 suggest a regulatory mechanism in *C. elegans* centriole assembly" **EMBO J.** 31: 4334-4347.
13. Esson HJ, Morriswood B, Yavuz S, Vidilaseris K, Dong G, and Warren G (2012) "Morphology of the trypanosome bilobe, a novel cytoskeletal structure" **Eukaryot. Cell** 11: 761-772.
14. Hung KW, Chang YW, Eng ET, Chen JH, Chen YC, Sun YJ, Hsiao CD, Dong G, Spasov KA, Unger VM, and Huang TH (2010) "Structural fold, conservation and Fe(II) binding of the intracellular domain of prokaryote FeoB" **J. Struct. Biol.** 170: 501-512.
15. Dong G, Wearsch PA, Peaper DR, Cresswell P, and Reinisch KM (2009) "Insights into MHC class I peptide loading from the structure of the tapasin/ERp57 heterodimer" **Immunity**, 30: 21-32. [Featured article of the Journal, F1000 selection]
16. Dong G, Medkova M, Novick P, and Reinisch KM (2007) "A catalytic coiled-coil: structural insights into the activation of the Rab GTPase Sec4p by Sec2p" **Mol. Cell**, 25, 455-462.
17. Novick P, Medkova M, Dong G, Hutagalung A, Reinisch KM, and Grosshans B (2006) "Interactions between Rabs, tethers, SNAREs and their regulators in exocytosis" **Biochem. Soc. Trans.** 34: 683-686.
18. Menon S, Cai H, Lu H, Dong G, Cai Y, Reinisch KM, and Ferro-Novick S (2006) "mBET3 is required for the organization of the TRAPP complexes" **Biochem. Biophys. Res. Commun.** 350: 669-677.

19. Dong G, Hutagalung AH, Fu C, Novick PJ, and Reinisch KM (2005) "Structures of Exo70p and the Exo84p C-terminal domains reveal a common motif" **Nat. Struct. Mol. Biol.** 12, 1094-1100.
20. Dong G, Chakshusmathi G, Wolin SL, and Reinisch KM (2004) "Structure of the La motif: a winged helix domain mediates RNA binding via a conserved aromatic patch" **EMBO J.** 23, 1000-1007.
21. Dong G, Noakowski J, and Hoffman DW (2002) "Structure of small protein B: the protein component of the tmRNA-SmpB system for ribosome rescue" **EMBO J.** 21, 1845-1854.
22. Zhou ZH, Baker ML, Jiang W, Dougherty M, Jakana J, Dong G, Lu GY, and Chiu W (2001) "Electron cryomicroscopy and bioinformatics suggest protein fold models for rice dwarf virus" **Nat. Struct. Mol. Biol.** 8: 868-873.
23. Liu S, Dong G, Wei X, and Lu GY (1998) "Crystallization of graylag goose (*Anser anser*) oxy-hemoglobin and preliminary X-ray crystallographic study" **Acta. Biophys. Sinica**, 14: 41-43.

Invited Talks (last 3 years)

1. *University of Osnabrück*, Osnabrück, Germany. May 19th, 2015.
2. *CNRS, University of Bordeaux*. Bordeaux, France. Oct 29th, 2014.
3. *EMBO Conference - Centrosomes and Spindle Pole Bodies*. Lisbon, Portugal. Sept 30th - Oct 3rd, 2014.
4. *6th ÖGMBT (Austrian Biophysics Society) Annual Meeting*. Vienna, Austria. Sept 14-16th, 2014.
5. *Crossing Frontiers in Life Sciences*. University of Vienna, Austria. Sept 11-12th, 2014.
6. *Iowa State University*. Ames, IA, USA. June 17th, 2014.
7. *Yale University, School of Medicine*. New Haven, CT, USA. June 13th, 2014.
8. *Gordon Research Conference - Biology of Host-Parasite Interactions*. Newport, RI, USA. June 8-13th, 2014.
9. *2013 Cilia, Flagella and Centrosome Meeting*. Carry-le-Rouet, France. Oct 7-9th, 2013.
10. *The University of Hong Kong*. Hong Kong, China. June 8th, 2013.
11. *2012 Cilia, Flagella and Centrosome Meeting*. Carry-le-Rouet, France. Oct 22-24th, 2012.
12. *3rd International Conference on Cellular Dynamics and Chemical Biology*. Hefei, China. Nov 16-18th, 2012.
13. *4th ÖGMBT (Austrian Biophysics Society) Annual Meeting*. Salzburg, Austria. Sept 17-19th, 2012.
14. *American Crystallographic Association Annual Meeting*. Boston, USA. July 28th - Aug 1st, 2012.
15. *Wuhan University*. Wuhan, China. May 11th, 2012.
16. *Institute of Hydrobiology, Chinese Academy of Science*. Wuhan, China. May 12th, 2012.

Teaching and Supervising Activities

1. 2015 (Winter Semester): Lectured in the graduate course “Methods in Molecular Biology and Biochemistry” (Medical University of Vienna, Austria)
2. 2015 (Summer Semester): Lectured in the graduate course “Biochemical and Biophysical Validation and Characterization Approaches” (University of Vienna, Austria)
3. 2010-2015 (Summer Semesters): Lectured in the graduate course “Advanced Methods in Cell Biology” (Medical University of Vienna, Austria)
4. 2014 (Winter Semester): Taught the practical training course “Protein Biochemistry” (University of Vienna, Austria)
5. 2012 (Summer Semester): Organized and taught lectures in “Structure and Function of Biological Macromolecules” (Vienna Biocenter PhD Program Lecture Series, Vienna, Austria)
6. 2008-present: Supervised 4 PhD students, 2 Post-docs, 2 technicians and 2 diploma students; hosted and supervised 13 visiting students and scholars
7. 2006-2007: Coordinated discussions in the graduate course “Biochemical & Biophysical Approaches in Molecular & Cellular Biology” (Yale University, New Haven, CT, USA)
8. 2001-2002: Lectured the graduate course “*Biochemistry Laboratory Techniques*” (University of Texas at Austin, USA)
9. 2000-2001: Taught the undergraduate practical course “*Techniques in Molecular Biology*” (University of Texas at Austin, USA)
10. 1999-2000: Assisted in teaching the undergraduate course “*Evolution and Ecology*” (University of Texas at Austin, USA)
11. 1996-1997: Taught undergraduate laboratories of “*Molecular & Biochemical Techniques*” (Peking University, Beijing, China)

External Funding (last 5 years)

1. P28231-B28: FWF Stand-alone Project “Structural Characterization of ZYG-1 in Centriole Assembly” Sum: **€450,513.00**. Supporting period: 2015-2018. Role: PI
2. W 1258 Doktoratskollegs (DKs): FWF International PhD Program “Integrative Structural Biology” Sum: **€200,000.00** (totally ~2 million EUR shared by 8 groups). Supporting period: 2015-2018. Role: co-PI
3. P24383-B21: FWF Stand-alone Project “Structural studies of the *Trypanosoma brucei* protein TbBILBO1” Sum: **€335,550.00**. Supporting period: 2012-2016. Role: PI
4. P23440-B20: FWF Stand-alone Project “Structural Studies of the Intraflagellar Transport Complexes” Sum: **€379,570.00**. Supporting period: 2011-2015. Role: PI
5. WWTF Life Sciences – Molecular Mechanisms and Methods Call 2009 “Towards sustainable food and bioenergy security for society: Establishing an academic compound screening platform in Vienna to characterize and modulate Strigolactone synthesis in plants” Sum: **€640,000.00**. Supporting period: 2010-2013. Role: Research Partner (PI: Tobias Sieberer)

6. ASEA-UNINET Graduate Scholarship. Funding agent - Austrian Federal Ministry of Education, Science and Culture. Sum: **€50,000.00**. Supporting period: 2010-2013. Role: Graduate Student Supervisor
7. EURASIA PACIFIC UNINET Exchange Scholarship. Funding agent - The Austrian Exchange Service (OeAD-GmbH), Centre for International Cooperation & Mobility (ICM). Sum: **€5,000.00**. Supporting period: April - June 2013. Role: Visiting Scholar Supervisor

Extracurricular Activities

1. Invited Guest Editor for the special issue "Cilia and Flagella: Biogenesis and Function" published in *Cells* (2015).
2. Membership of the Austrian Biophysical Society (2010 – present).
3. Invited and hosted 15 national/international speakers at the Vienna Biocenter (2009 – present).
4. Membership of the American Society for Cell Biology (2004 – 2010)
5. Editorial or Review board member of (1) *Cells*, (2) *Frontiers in Cell Growth and Division*, (3) *Journal of Syndromes*, (4) *Journal of Molecular Biology and Molecular Imaging*, and (5) *Aperito Journal of Bacteriology, Virology & Parasitology*.
6. Reviewer for scientific journals including *Nature Structure & Molecular Biology*, *Nature Cell Biology*, *Nature Chemical Biology*, *EMBO Journal*, *Journal of Cell Biology*, etc.
7. Reviewer for national & international grant applications.