Professor Henggui Zhang Curriculum Vitae

Education Qualifications:
1994: Ph.D. in Computational Cardiology (Leeds).
1988: M.Sc. in Computer Science and Laser Physics (USTC & Chinese Academy of Science).
1985: B.Sc. in Physics (top 5%, ANU, China).

Present Appointment:
2009-present Professor, Chair of Biological Physics, School of Physics & Astronomy, The University of Manchester.

Appointments Held:

2006-2009	Reader in Biological Physics, School of Physics & Astronomy, The University of Manchester.
2004-2006	Senior Lecturer, School of Physics & Astronomy, The University of Manchester.
2001-2004	Lecturer, Department of Physics, UMIST.
2000-2001	Senior Research Fellow at the School of Biomedical Sciences, the University of Leeds.
1997-2000	Postdoctoral Research Fellow at the School of Biomedical Sciences, the University of Leeds.
1995-1997	Postdoctoral Research Fellow at the Physiology Department, the University of Leeds.
1994-1995	Postdoctoral Research Fellow at the Department of Biomedical Engineering, the Johns Hopkins University School of Medicine, USA.
1991-1994	Research Fellow at the Department of Physiology, the University of Leeds.
1990-1991	Research Fellow at the Centre for Nonlinear Studies, the University of Leeds.

Experience of research training provision:

Current PhD students:	9 (principal supervisor)
Graduated PhD students:	15 (principle supervisor)
Graduated MSc/MPhys/MPhil students:	60

Selected large scale research grants

2005-2010	£620K from BBSRC (with MR Boyett et al.). e-Science of Heart.
2005-2010	£6.2M from BBSRC (with D Kell et al.). Integrative Biology.
2007-2010	£386K from the Wellcome Trust (with M Lei). Computer modelling of cardiac pacemaker.
2011-2016	£1.491M from the British Heart Foundation (Programme Grant with MR Boyett). Imaging and integrative models of cardiac conduction systems.
2012-2015	£350K from EPSRC. 3D virtual human atria.

Evidence of international standing

Editorial Boards of:
Frontiers in Computational Biology and Medicine; Journal of Bioprocess and Biotechnology; Computational and Mathematical Methods in Medicine

Reviewers for international learned journals of:
Biophysical Journal; Cardiovascular Research; IEEE Transactions on Biomedical Engineering; New Journal of Physics; Physics in Medicine and Biology; Physiological Measurement; Progress in Biophysics & Molecular

Biology; Bulletin of Mathematical Biology; Journal of Theoretical Biology; Journal of Electrophysiology; Applied Physics Letters; Pharmacological Research

Guest professorship/fellowship held at international learned institutes of:

2005-	Visiting Professor at School of Computer Science, Harbin Institute of Technology, Harbin, China
2001- 2006	Guest Research Scientist at School of Biomedical Science, the University of Leeds
2009	Visiting Fellow at the Isaac Newton Institute, Cambridge University
2011-	Contract Professor at Harbin Institute of Technology, Harbin, China
2011-	Guest Professor at Harbin Institute of Technology, Weihai, China

10 Selected Publications:

1. Adeniran I, McPate MJ, Witchel HJ, Hancox JC, **Zhang H** (2011). Increased vulnerability of human ventricle to re-entrant excitation in hERG-linked variant 1 short QT syndrome. *PLoS Comput Biol.* 7(12):e1002313.
2. Aslanidi OV, Colman MA, Stott J, Dobrzynski H, Boyett MR, Holden AV, **Zhang H** (2011). 3D virtual human atria: A computational platform for studying clinical atrial fibrillation. *Prog Biophys Mol Biol.* 107:156-68.
3. Colman MA, Aslanidi OV, Stott J, Holden AV, **Zhang H** (2011). Correlation between p-wave morphology and origin of atrial focal tachycardia-insights from realistic models of the human atria and torso. *IEEE Trans Biomed Eng.* 58(10):2952-5.
4. Butters TD, Aslanidi OV, Inada S, Boyett MR, Hancox JC, Lei M, **Zhang H**. Mechanistic links between Na+ channel (SCN5A) mutations and impaired cardiac pacemaking in sick sinus syndrome. *Circ Res*. 2010;107(1):126-37.
5. Aslanidi OV, Sleiman RN, Boyett MR, Hancox JC, **Zhang H** (2010). Ionic mechanisms for electrical heterogeneity between rabbit Purkinje fiber and ventricular cells. *Biophys J.* 98(11):2420-31.
6. Aslanidi OV, Stewart P, Boyett MR, **Zhang H** (2009). Optimal velocity and safety of discontinuous conduction through the heterogeneous Purkinje-ventricular junction. *Biophys J.* 97(1):20-39.
7. **H Zhang**, CJ Garratt, JJ Zhu, AV Holden (2005). "Role of up-regulation of I(K,1) in action potential shortening associated with atrial fibrillation in human." *Cardiovascular Research* **66**: 493-502.
8. **H Zhang**, AV Holden, D Noble and MR Boyett (2002). "Analysis of the chronotropic effect of acetylcholine on sinoatrial node." *Journal of Cardiovascular Electrophysiology* **13**: 465-474.
9. **H Zhang**, AV Holden, MR Boyett (2001). "Gradient versus MOSAIC models of rabbit sinoatrial node." *Circulation* **103**: 584-588.
10. **H Zhang**, AV Holden, I Kodama, H Honjo, M Lei, T Vagues, MR Boyett (2000). "Mathematical models of action potentials in the periphery and centre of the rabbit sinoatrial node." *American Journal of Physiology (Heart and Circulation)* **279**(1): H397-H421.