

## 教授(正高名录)

特聘教授

基础医学院

**生物医学工程学院**

药学院

公共卫生学院

护理学院

口腔医学院

深圳大学总医院

深圳大学附属华南医院

深圳大学第一附属医院

## 生物医学工程学院

您现在的位置: 首页 &gt; 师资队伍 &gt; 教授(正高名录) &gt; 生物医学工程学院



## 钱建庭

学院: 生物医学工程学院

专业: 医学超声

职称: 教授

简介:

教育经历

- 1988-1992年, 加拿大多伦多大学, 工程科学系, 获学士(荣誉)学位
- 1992-1994年, 加拿大多伦多大学, 物理系, 获硕士学位,

Prof. R Marjoribanks

- 1994-2000年, 加拿大多伦多大学, 医学生物物理系, 获博士学位, Prof. P Burns

## ▶ 主要工作经历

·2001-2003年,荷兰鹿特丹大学,研究科学家

·2001-2003年,瑞士Bracco研究中心,项目科学家(兼职)

·2003-2010年,飞利浦研究院(北美),资深科学家

·2010年-至今, 深圳大学, 医学院生物医学工程系, 教授、教学研究室副主任

邮箱: c. t. chin@szu. edu. cn

## ▶ 荣誉和奖励

- 最佳会议海报, 美国心脏学会, 2008
- 杰出团队奖(新创造奖), 飞利浦北美研究中心, 2007
- 杰出团队奖(超声基因转染), 飞利浦北美研究中心, 2006
- 特邀论文—第4届国际超声造影成像大会, 2002
- 特邀论文—第6届欧洲超声造影成像大会, 2001
- 特邀论文—第5届欧洲超声造影成像大会, 2000
- 特邀论文—第135届美国声学学会年会, 1998
- 优秀论文奖—加拿大医学物理学年会, 1998
- 青年科学家奖—第3届欧洲超声造影成像大会, 1998

## ▶ 国际专利(共19项, 部分如下)

1. C T Chin, C S Hall, A L Klibanov; Device and method of tumor treatment using ultrasound cavitation, (US 61/169355)
2. C T Chin, C S Hall, K Tiemann, A Ghanem; Ultrasound enhanced stem cell delivery device and method, (US 61/089642)
3. C T Chin, C S Hall, D L M Savery, S Sokka; Microbubble Generating Technique For Phase Aberration Correction (US 2008/10208059 A1; W02006095288 A1)
4. M Averkiou, C T Chin, C S Hall, D L M Savery, S Sokka; Method and Apparatus for the Visualization of the Focus Generated Using Focused Ultrasound (US 2008/0208059 A1)

## ▶ 科研成果

## ▶ SCI 期刊论文:

1. Yuanyuan Shen, Tianfu Wang, C T Chin, Xianfen Diao and Siping Chen, Study on Interaction Between Microbubble and Elastic Microvessel in Low Frequency Ultrasound Field Using Finite Element Method, Chinese Science Bulletin, (in review).

2. 邱晓晖, 沈圆圆, 钱建庭, 刁现芬, 汪天富, 陈思平, 刚性微管内微泡动

力学行为的有限元数值分析, 生物医学工程学杂志, 2011年第5期。(non-SCI)

3. A L Klibanov, T I Shevchenko, B I Raju, R Seip, C T Chin, Ultrasound entrapped in microbubble-liposome constructs: a tool for targeted drug delivery, *Ultrasound Med Biol.* 2009; 35(1):13-17.
4. M R Böhmer, C H T Chlon, B I Raju, C T Chin, T Shevchenko, A L Klibanov, Microbubbles for enhanced extravasation. *J Controlled Release* 2010; 148(1):13-17.
5. R Seip, C T Chin, C Hall, B I Raju, A Ghanem, K Tiemann, Targeted Nanoparticles: on the development of a new HIFU-based therapy and imaging, *Ultrasound Med Biol.* 2009; 35(1):61-70.
6. A Ghanem, C Steingen, F Brenig, F Funcke, Z-Y Bai, C Hall, C T Chin, Focused ultrasound-induced stimulation of microbubbles augments site-specific cell death after acute myocardial infarction, *J. Mol. Cell. Cardiol.* 2009; 46(1):1-10.
7. S M van der Meer, B Dollet, M M Voormolen, C T Chin, A Bouakaz, I M van der Meulen, Microbubble spectroscopy of ultrasound contrast agents, *J. Acoust. Soc. Am.* 2007; 121(5):2800-2807. (被引用11次ISI)
8. N de Jong, M Emmer, C T Chin, A Bouakaz, F Mastik, D Lohse and M Versluis, Acoustic Characterization of Phospholipid-Coated Contrast Bubbles, *Ultrasound Med Biol.* 2007; 33(1):1-10. (被引用11次ISI)
9. J M G Borsboom, C T Chin, A Bouakaz, M Versluis and N de Jong, Harmonic Contrast Imaging with a Non-linear Ultrasound Contrast Agent, *IEEE Trans. Ultrason Ferroelec Freq Contr.* 2004; 51(3):286-292. (被引用11次ISI)
10. R J Eckersley, C T Chin, P N Burns, Optimising Phase and Amplitude for Contrast Imaging with Microbubble Contrast Agents at Low Acoustic Power; *Ultrasound Med Biol.* 2004; 30(1):1-10. (被引用11次ISI)
11. J Borsboom, C T Chin, N de Jong, Experimental evaluation of a non-linear contrast imaging, *Ultrasonics* 2004; 42:671-5. (被引用11次ISI)
12. C T Chin, C Lancée, J M G Borsboom, F Mastik, N de Jong, M Versluis, A high speed camera with 25 million frames per second camera with 128 highly sensitive frames, *Ultrasonics* 2004; 42:3026-34. (被引用61次ISI)
13. J M G Borsboom, C T Chin, N de Jong, Non-linear coded excitation contrast imaging, *Ultrasound Med. Biol.*, 2003; 29:277-284. (被引用32次ISI)
14. M Postema, A Bouakaz, C T Chin, N de Jong, Simulations and measurements of the acoustic response of ultrasound contrast microbubbles, *IEEE Trans. Ultrason Ferroelec Freq Contr.* 2004; 51(3):286-292. (被引用25次ISI)
15. C T Chin, P N Burns, Investigation of the effects of microbubble scattering and implications for modeling contrast agent behaviour, *IEEE Trans. Ultrason Ferroelec Freq Contr.* 2004; 51(3):286-292.
16. C T Chin, P N Burns, Predicting the acoustic response of a microbubble in medical ultrasound, *Ultrasound Med Biol.* 2000; 26:1289-96. (被引用25次ISI)
17. D Hope Simpson, C T Chin, P N Burns, Pulse inversion Doppler: a method for detecting echoes from microbubble contrast agents, *IEEE Trans Ultrason Ferroelec Freq Contr.* 2000; 47(1):1-10. (被引用221次ISI)
18. H Yamakoshi, C T Chin, S Jaimungal, P R Herman, L Zhao, G Kulcsar, Practical Self-Healing Mercury-Target for Efficient Generation of Short-Wavelength Extreme-ultraviolet Laser, *Appl Phys Lett* 65(6), 1964-1967 (1994)
19. H Yamakoshi, C T Chin, S Jaimungal, P R Herman, L Zhao, G Kulcsar, Self-healing Mercury Target for Efficient Generation of Short-Wavelength Extreme-ultraviolet Laser Photo-pumped by a Self-healing Hg Target, *Proc SPIE*, vol. 2015, 227-231 (1993)

#### ► 会议论文

1. C T Chin, Dandan Deng, Yanbi Chen, Xing Ding, Yao Chen, Yinghui Liu, Multicenter Clinical Trial of HIFU Ablation of Uterine Fibroid, *World Scientific Biomedical Engineering.*, 2012.
2. Jinjin Zhang, Siping Chen, Tianfu Wang, and C T Chin, Quantitative

Ultrasound Contrast Agent to Therapeutic Ultrasound. World Congress of Engineering., 2012.

3. 张金金, 王国毅, 陈思平, 汪天富, 钱建庭, 治疗用超声微泡的定量声学测量年会, 2011.

4. Y Y Shen, X H Qiu, C T Chin, Finite Element Analysis of the Dynamic Microbubble within a Rigid Micro-Vessel, The 5th WACBE World Congress

5. R Seip, B Raju, E Leyvi, C T Chin, S Li, C Rouse, D Koeberl, W Foc plasmid DNA in the liver with ultrasound and microbubbles. IEEE Proc.

6. A L Klibanov, T. Shevchenko, Z. Du, B Kundu, R Seip, B Raju, C T Chin, Image-Guided Insonation of Microbubbles in the Tumor Vasculature: Position 3rd Annual Image-Guided Therapy Workshop, National Center for Image

7. A L Klibanov, T I Shevchenko, B I Raju, R Seip, C T Chin, Ultrasound entrapped in microbubble-liposome constructs: a tool for targeted drug Controlled Drug Delivery, Egmond aan Zee, The Netherlands, 2010

8. M R Bohmer, C H T Chlon, B I Raju, C T Chin, T I Shevchenko, A L Klibanov, microbubbles for enhanced transport across the endothelial border, 15th Drug Delivery, Egmond aan Zee, The Netherlands, 2010. (invited)

9. A L Klibanov, T I Shevchenko, B Kundu, Z Du, M Bohmer, B I Raju, I Klibanov, microbubbles and ultrasound: mechanism of tumor growth control, 15th World Imaging, Rotterdam 2010.

10. C T Chin, A Ghanem, C Troatz, C Hall, K Tiemann, Ultrasound mediated RNA, IEEE Int. Ultrasonics Symp., 2009.

11. C T Chin, T Shevchenko, B I Raju, A L Klibanov, Control and reversal of activated microbubbles, IEEE Int. Ultrasonics Symp., 2009.

12. A L Klibanov, T Shevchenko, M Celebi, C Hall, C T Chin, Reduction of tumor vasculature after microbubble destruction by ultrasound, Radiological Society of America, 2009.

13. A L Klibanov, T Shevchenko, M Kundu, M R Bohmer, R Seip, B I Raju, I Klibanov, microbubbles in the tumor vasculature by focused ultrasound inhibits tumor growth, World Mol. Imaging Congress, 2009. (invited)

14. A Ghanem, C Steingen, F Brenig, Z-Y Bai, C Hall, C T Chin, G Nicolini, Ultrasound induced stimulation of microbubbles augments and targets myocardial perfusion in vivo, Am Heart Assoc, 2008.

15. K Tiemann, C T Chin, C S Hall, From targeted imaging to targeted drug delivery to cardiovascular structures, 13th Euro. Symp. Ultrasound Contrast Imaging, 2009.

16. C T Chin, T I Shevchenko, B Verhaagen, A L Klibanov, Liposome-microbubble triggered release of liposome contents, MR Guided Focused Ultrasound, 2009.

17. T I Shevchenko, C T Chin, and A L Klibanov, Liquid perfluorocarbon microbubbles as enhancers of ultrasound imaging and therapy, MR Guided Focused Ultrasound, 2009.

18. A L Klibanov, M Celebi, C T Chin, J J Rychak, K Ley, Intravascular drug delivery: Ultrasound Contrast Microbubbles via Intraperitoneal Administration, 2009.

19. W. T. Shi, M. Böhmer, A. van Wamel, M. Celebi, A. L. Klibanov, C. S. de Jong, C. S. Hall, Ultrasound Therapy with Drug Loaded Microcapsules, 2009.

20. C T Chin, C Hall, A S Klibanov, A Controlled In-vitro Investigation of Drug Delivery, IEEE Ultrasonics Symp, 2006.

21. M Versluis, Philippe Marmottant, Sascha Hilgenfeldt, and Claus-Dieter de Jong, D Lohse, Ultra-high-speed imaging of bubbles interacting with a wall, Acoust. Soc. Am, December 2006.

22. C T Chin, A van Wamel, M Emmer, N de Jong, C Hall, A S Klibanov, Ultrasound Drug Delivery: High-Speed Camera Observations of Microbubbles with Acoustic Streaming, IEEE Symp., 2005.

23. M Versluis, S M van der Meer, D Lohse, P Palanchon, D Goertz, C modes, IEEE Ultrasonics Symp., 2004.
24. C T Chin, M Versluis, C Lancée, N de Jong, Free and Forced Oscillations of a Microbubble Observed with a New 25 Million Frames per Second Camera, IEEE Ultrasonics Symp., 2003.
25. C T Chin, J Borsboom, N de Jong, Improved Frame Rate by Reduction of Coded Excitations, IEEE Ultrasonics Symp., 2003.
26. J Borsboom, C T Chin, N de Jong, In Vitro B-mode Contrast Imaging with a Nonlinear Decoder, IEEE Ultrasonics Symp., 2003.
27. D E Goertz, M E Frijlink, A Bouakaz, C T Chin, N de Jong, A F W Distribution of Nonlinear Scattering from Microbubbles at High Frequencies, IEEE Ultrasonics Symp., 2003.
28. M Versluis, D Lohse, N de Jong, C T Chin, C Lancee, J Honkoop, F J Borsboom, microbubble dynamics at 40 ns time scale, Euromech Fluid Mechanics Conference, 2003.
29. J Borsboom, C T Chin, N de Jong, Experimental evaluation of a nonlinear decoder for contrast imaging, Ultrasonics International (Granada), 2003.
30. C T Chin, N de Jong, C Lancée, J Borsboom, F Mastik, M Versluis, Contrast bubble motions at 25 million frames per second, 4th Int Symp Ultrasonics, 2002.
31. C T Chin, A Bouakaz, J Borsboom, N de Jong, Super harmonics and sub-harmonics detection methods for ultrasound contrast imaging, 4th Int Symp Ultrasonics, 2002.
32. N de Jong, C T Chin, C Lancée, J Borsboom, F Mastik, M Versluis, A mirror digital camera with 128 frames at 25 Mfps, Int Conf High Speed Imaging, 2002.
33. M Postema, A Bouakaz, C T Chin, N de Jong, Optically observed microbubble dynamics, Proc IEEE Ultrason Symp 2002.
34. J Borsboom, C T Chin, N de Jong, Chirped excitation for contrast measurements, Proc IEEE Ultrason Symp 2002.
35. D E Goertz, S W S Wong, E Cherin, C T Chin, P N Burns, F S Foster, microbubble contrast agents at high frequencies, Proc IEEE Ultrason Symp 2002.
36. C T Chin, R Kharchakdjian, P N Burns, A Simple Model of the Vascular Tissue Destruction Reperfusion Measurements, The 6th Euro. Symp on Ultrasonics, 2000.
37. C T Chin, The Effects of the Bubble Shell on Single-Pulse Nonlinear Resonance, 5th Euro. Symp on Ultrasound Contrast Imaging 2000. (invited)
38. C T Chin, P N Burns, Predicting acoustic response of a microbubble, Proc IEEE Ultrason Symp 1997.
39. P N Burns, J E Powers, D Hope Simpson, A Brezina, A Kolin, C T Chin, Power Mode Doppler using Microbubble Contrast Agents: an Improved Method, Proc IEEE Ultrason Symp 1994.