Dr. Bin Qu
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Curriculum Vitae

GENERAL

Date of birth	:	27.03.1980
Place of birth	:	Hebei, China
Gender	:	Female
Family Status	:	Married with two children Maternity leave: 05.2011 – 02.2012 and 04.2014 – 03.2015

EDUCATION

2010	Dr. rer. nat (summa cum laude) in Biology, Dept. of Biophysics Saarland University, Faculty of Medicine, Germany
2006	M.Sc in Cell Biology, Institute of Biochemistry and Cell Biology, Shanghai Institutes for Biological Sciences, Chinese Academy of Science, Shanghai, China
2001	B.Sc in Biological Sciences, School of Life Sciences, University of Science and Technology of China, Hefei, China

PROFESSIONAL CAREER

Since 12.2017	INM Fellow, Leibniz Institute for New Materials (INM)
Since 01.2013	Project leader (A2) within SFB1027 'Physical modeling of non-equilibrium processes in biological systems', Saarland University
Since 01.2013	Group leader, Dept. of Biophysics, Saarland University
01.2013-12.2016	Executive Principle Investigator for GZ857 'Modulation of CTL Function by Profilin-1 in Pancreatic Cancer', Saarland University
07.2009-12.2012	Postdoctoral Researcher, Dept. of Biophysics, Saarland University

THIRD PARTY FUNDING (In total: ~1.4 million €)

01.2017-12.2020	Extended Collaborative Research Center (CRC) 1027 Project A2 (Qu/Hoth) funded by the Deutsche Forschungsgemein-schaft (DFG), ~ 669.0 k€
01.2013-12.2016	CRC1027 Project A2 (Hoth/Qu) funded by the DFG, ~ 627.9 k€
01.2013-12.2016	Sino-German collaboration project (GZ857) funded by the Sino-German Center for Research Promotion (Yu/Hoth, Executive PI: Qu), ~ 67.9 k€
2017	Miniproposals funded by SFB1027, 12,315 €
2015	Miniproposals funded by SFB1027, 8,162 €
2014	Miniproposals funded by SFB1027, 12,278 €

2013	Miniproposals funded by SFB1027, 13,615 €

HONORS & DISTINCTIONS

2018	Calogero-Pagliarello Research Prize for the Year of 2017
2017	INM Fellow, Leibniz Institute for New Materials (INM)
Since 2013	Executive Board Member of CRC1027, Saarland University
2006	Ph.D. Scholarship of GK1326, Saarland University

AD-HOC REVIEWER

- BBA-Reviews on Cancer
- Cancer Letters
- International Journal of Cancer
- Journal of Genetics and Genome Research
- International Journal of Oncology
- Molecular Cancer Research
- Cell Proliferation

COLABORATIONS (past five years)

Germany

- Prof. H Rieger, Dept. of Theoretical Physics, Saarland University, Saarbrücken
- Prof. M Hannig, Dept. of Dental Clinic, Saarland University, Homburg
- Prof. B Burwinkel, German Cancer Research Center, Heidelberg
- Prof. A Del Campo, Leibniz Institute for New Materials, Saarbrücken
- Prof. S Ingebrandt, University of Applied Science Kaiserslautern, Zweibrücken

China

- Prof. X Yu, Dept. of Pancreatic and Hepatobiliary Surgery, Fudan University Shanghai Cancer Center, Shanghai
- Prof. L Zou, Dept. of Clinical Laboratory Diagnosis, Children's Hospital of Chongqing Medical University, Chongqing
- Dr. J Zhu, Dept. of Endocrinology, The First Affiliated Hospital of USTC, Hefei

SYMPOSIUMS ORGANISED

2011	Sino-German Symposium 'Cancer immunotherapy, pancreatic cancer, and cancer-immune-related basic research' funded by the Sino-German Center for Research Promotion, Shanghai
2018	Sino-German Symposium 'Cell fate and tumorigenesis: from animal models to human diseases' funded by the Sino-German Center for Research Promotion, Chongqing

CURRENT RESEARCH PROJECTS

1. Regulation of NK cell cytotoxicity by CTL and T helper cells
2. Impact of substrate stiffness on killing function of NK and CTL
3. Establishment of in vitro three-dimensional screening platform for NK and CTL

SELECTED PAPERS

1. Zhou Y, Zhao R, Schwarz EC, Akbar R, Pattu V, Helms V, Rieger H, **Qu B**[#]. Lysosome-related organelle tethering controls directionally distinct cytokine transport in T cells. *(In preparation)*
2. Schoppmeyer R, Zhao R, Hoth M, **Qu B**[#]. 2018. Light-sheet microscopy for three-dimensional visualization of human immune cells. *J Vis Exp* (136), e57651.
3. Zhou X, Zhao R, Schwarz K, Mangeat M, Schwarz EC, Hamed M, Bogeski I, Helms V, Rieger H, **Qu B**[#]. 2017. Bystander cells enhance NK cytotoxic efficiency by reducing search time. *Sci Rep* 7: 44357
4. Schoppmeyer R[*], Zhao R[*], Cheng H[*], Hamed M, Liu C, Zhou X, Schwarz EC, Zhou Y, Knorck A, Schwar G, Ji S, Liu L, Long J, Helms V, Hoth M, Yu X[#], **Qu B**[#]. 2017. Human profilin 1 is a negative regulator of CTL mediated cell-killing and migration. *Eur J Immunol* 47:1562-72
5. Kummerow C, Schwarz EC, Bufe B, Zufall F, Hoth M, **Qu B**[#]. 2014. A simple, economic, time-resolved killing assay. *Eur J Immunol* 44: 1870-2
6. Shaw PJ[*], **Qu B**[*], Hoth M, Feske S. 2013. Molecular regulation of CRAC channels and their role in lymphocyte function. *Cell Mlol Life Sci* 70: 2637-56
7. Pattu V[*], **Qu B**[*], Schwarz EC, Strauss B, Weins L, Bhat SS, Halimani M, Marshall M, Rettig J, Hoth M. 2012. SNARE protein expression and localization in human cytotoxic T lymphocytes. *Eur J Immunol* 42: 470-5
8. **Qu B**[*], Pattu V[*], Junker C, Schwarz EC, Bhat SS, Kummerow C, Marshall M, Matti U, Neumann F, Pfreundschuh M, Becherer U, Rieger H, Rettig J, Hoth M. 2011. Docking of lytic granules at the immunological synapse in human CTL requires Vti1b-dependent pairing with CD3 endosomes. *J Immunol* 186: 6894-904
9. **Qu B**, Al-Ansary D, Kummerow C, Hoth M, Schwarz EC. 2011. ORAI-mediated calcium influx in T cell proliferation, apoptosis and tolerance. *Cell calcium* 50: 261-9
10. Pattu V[*], **Qu B**[*], Marshall M, Becherer U, Junker C, Matti U, Schwarz EC, Krause E, Hoth M, Rettig J. 2011. Syntaxin7 is required for lytic granule release from cytotoxic T lymphocytes. *Traffic* 12: 890-901
11. Kang J[*], Shi Y[*], Xiang B[*], **Qu B**, Su W, Zhu M, Zhang M, Bao G, Wang F, Zhang X, Yang R, Fan F, Chen X, Pei G, Ma L. 2005. A nuclear function of beta-arrestin1 in GPCR signaling: regulation of histone acetylation and gene transcription. *Cell* 123: 833-47
12. Gao H, Sun Y, Wu Y, Luan B, Wang Y, **Qu B**, Pei G. 2004. Identification of beta-arrestin2 as a G protein-coupled receptor-stimulated regulator of NF-kappaB pathways. *Molecular cell* 14: 303-17

(* First author, [#] corresponding author)