

Ze TANG, Ph.D

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Work Experience

Siemens Healthineers, Laboratory Diagnostics

Jan 2014 – Feb 2016 (2 year 2 months) | Shanghai

- **Biochemist**

- Immunoassay (CLIA) Manufacturing Troubleshooting Solution
- CAPA (Corrective Action / Preventive Action)
- QA / QC (Quality assurance / Quality Control)
- GMP / GLP

- **National Technical Application Specialist (Level 2)**

- Troubleshooting Solution and Application Support
 - Clinical Chemistry System (ADVIA and Dimension)
- Application Training for Field Application Specialists, distributors and customers
 - Clinical Chemistry System (ADVIA and Dimension)
 - Nephelometric System (BN II and ProSpec)
 - Hematology System (ADVIA 2120i)
- Automation Workflow Project
 - Remote data collection and control for analyzers in Aptio automation
- Performance Verification (Proficiency testing)



Education

PhD in Biochemistry, Molecular and Cell Biology

Sep 2007 – Jul 2013

Institute of Health Sciences, Shanghai Institutes for Biological Sciences,
Chinese Academy of Sciences & Shanghai Jiao Tong University School of Medicine

Advisor: Prof. Kerong Dai, MD, Academician of the Chinese Academy of Engineering

MS in Immunology

Sep 2005 – Jul 2007

Norman Bethune College of Medicine, Jilin University

MBBS (Bachelor of Medicine, Bachelor of Surgery)

Sep 1999 – Jul 2004

Norman Bethune College of Medicine, Jilin University

Technical Experiences

Clinical Laboratory Automation (IVD)

Aptio (Inpeco FlexLab) Automation System; CentraLink Data Management System (Middleware); ADVIA/Dimension Clinical Chemistry System; Centaur XP/CP Chemiluminescence Immunoassay System; BD Aria & Calibur flow cytometry; ADVIA 2120i Hematology System; BN II/ProSpec Nephelometric System; CAP; ISO 15189

Biochemistry, Molecular and Cell Biology

Chemiluminescent detection; Western blot; In cell western; Co-IP; Roche Lightcycler 480 Real-Time PCR System; SNP genotyping (High Resolution Melt); ABI 7900HT/7500 Fast Real-Time PCR System; DNA/RNA isolation; Mesenchymal stem cell (MSC) isolation and culture; Multilineage induction of stem cells; Migration and invasion of tumor; cell transfection; luciferase assay

Histological Analysis

Immunohistochemistry (IHC); Immunofluorescence (IF); Hard tissue section; Frozen section; Alizarin red staining; Oil red O staining; ALP staining; Histomorphometry with Bioquant/Imagej; Carl Zeiss / Leica Confocal microscopy

Medical Implant Animal Model

Micro-CT analysis with Siemens Inveon Research Workplace (IRW); XRD (X-ray diffraction) analysis with MDI Jade; Femoral condyle implant model; Double fluorescence labeling in vivo; Laboratory animal handling

Bioinformatics

Bowtie2; BWA; Samtools; Bedtools; Tophat

Data Mining, Machine Learning and Data Visualization

Python; R; JMP; SPSS; SAS

Programming

Python; Java (with SCJP Cert); C; Javascript; Matlab; Octave; Linux Shell

Publications

- ❑ **Ze Tang**, Youtao Xie, Fei Yang, Yan Huang, Chuandong Wang, Kerong Dai, Xuebin Zheng, Xiaoling Zhang, Porous Tantalum coatings prepared by vacuum plasma spraying enhance BMSCs osteogenic differentiation and bone regeneration in vitro and in vivo. PLoS ONE, 8(6): e66263. [doi: 10.1371/journal.pone.0066263](https://doi.org/10.1371/journal.pone.0066263)
- ❑ Bing Tu, Lin Du, Qi-Ming Fan, **Ze Tang**, Ting-Ting Tang, STAT3 activation by IL-6 from mesenchymal stem cells promotes the proliferation and metastasis of osteosarcoma. Cancer Lett, 2012. 325(1): p. 80-8. [doi: 10.1016/j.canlet.2012.06.006](https://doi.org/10.1016/j.canlet.2012.06.006)

- ❑ Chunxi Yang, Guangyin Yuan, Jia Zhang, **Ze Tang**, Xiaoling Zhang, Kerong Dai, Effects of magnesium alloys extracts on adult human bone marrow-derived stromal cell viability and osteogenic differentiation. Biomed Mater, 2010. 5(4): p. 045005. [doi: 10.1088/1748-6041/5/4/045005](https://doi.org/10.1088/1748-6041/5/4/045005)

Patents

- ❑ Xiaoling Zhang, Youtao Xie, **Ze Tang**, Kerong Dai. 2014. Medical composite material with improved osseointegration performance. Application No. CN 201310163527, May 3, 2013, Publication No. CN104127913 A, Nov 5, 2014. Patent Pending

Referees

Kerong Dai, MD

Fellow of Academy of the Chinese Academy of Engineering

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Tingting Tang, MD, PhD

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