

**Shuk Han CHENG (néé Shuk Han CHUNG)****Education**

85-90 PhD / RA (Department of Bacteriology, Royal Postgraduate Medical School, University of London)

80-83 BSc (Department of Zoology, University of Hong Kong)

**Employment**

10-date Professor, Department of Biology &amp; Chemistry, City University of Hong Kong

01-10 Associate Professor, Department of Biology &amp; Chemistry, City University of Hong Kong

00-01 Assistant Professor, Department of Biology &amp; Chemistry, City University of Hong Kong

97-00 Research Assistant Professor, Department of Biology &amp; Chemistry, City University of Hong Kong

93-97 Lecturer/Scientific Officer, Depts of Paediatrics and Orthopaedics, Chinese University of Hong Kong

90-93 Postdoctoral Fellow in Tak Mak's lab, Ontario cancer Institute, University of Toronto

**Research Interest:** developmental and regenerative biology, nanobiological interface, nanomedicine**Publications Records:** 75 papers in SCI journals, 2 book chapters & 10 referred conference proceedings (full list available upon request), 1 patent awarded and 8 patents filedFive most representative publications in recent 5 years: \* denotes corresponding authorship

1. Cheng J., \* **Cheng S.H.** (2011) Poly(ethylene glycol) conjugated multi-walled carbon nanotubes as an efficient drug carrier for overcoming multi-drug resistance. *Toxicology and Applied Pharmacology* 250:184-93.
2. Cheng J., Chan CM, Veca LM, Poon W.L., Chan P.K., Qu L, \*Sun Y.-P., \***Cheng S.H.** (2009). Acute and long-term effects after single loading of functionalized multi-walled carbon nanotubes into zebrafish (*Danio rerio*) *Toxicology & Applied Pharmacology* 235:216-225.
3. Gu Y.-J., Cheng J., Lin A.C.-C., Lam Y.W., \***Cheng S.H.**, \*Wong W.-T. (2009). Nuclear Penetration of Surface Functionalized Gold Nanoparticles. *Toxicology & Applied Pharmacology* 237:196-204.
4. Cheng J., Shiral Fernando K. A., Monica Veca L., Sun Y.P., Lamond A.I., \*Lam Y.W., \***Cheng S.H.** (2008). Reversible accumulation of PEGylated single-walled carbon nanotubes in the mammalian cells. *ACS Nano* 2(10):2085-2094.
5. Cheng J, Flahaut E, \***Cheng S.H.** (2007). Effect of single-walled carbon nanotubes on developing zebrafish (*Danio rerio*) embryos. *Environmental Toxicology and Chemistry* 26:708-716.

Five representative publications beyond the recent 5 years: \* denotes corresponding authorship

1. Costantini D.L., Arruda E.P., Agarwal P., Zhu Y., Zhu W., Lebel M., Cheng C.W., Park C.Y., Pierce S., Chan T.Y., Kabir M.G., **Cheng S.H.**, Husain M., Srivastava D., Gross G.J., Hui C.-c., \*Backx P.H., \*Bruneau B.G. (2005) The homeodomain transcription factor *Irx5* establishes the mouse cardiac ventricular repolarization gradient. *Cell* **123**: 347-358.
2. Lebel M., Agarwal P., Cheng C.W., Kabir M.G., Chan T.Y., Thanabalasingham V. Zhang X., Cohen D.R., Hussain M., **Cheng S.H.**, Bruneau B.G., \*Hui C.-c. (2003) The *Iroquois* homeobox gene *Irx2* is not essential for normal development of heart and midbrain/hindbrain boundary in mice. *Molecular and Cellular Biology* **23**:8216-8225.
3. \***Cheng S.H.**, Chan P.K., Wu R.S.S. (2001) The use of microangiography in detecting aberrant vasculature in zebrafish embryos exposed to cadmium. *Aquatic Toxicology* **52**: 61-71.
4. Mo, R., Freer A. M., Zinykl D. L., Crackower M. A., Michaud J., Heng H. H.-Q., Chik K. W., Shi X.-M., Tsui L.-C., **Cheng S. H.**, Joyner A. L., \*Hui C.-c.. (1997) Specific and redundant functions of *Gli2* and *Gli3* zinc finger genes in skeletal patterning and development. *Development*, **124**, 113-123.
5. **Cheng, S. H.**, \*Mak T. W. (1993) Molecular characterisation of three murine *HOX11*-related homeobox genes, *Tlx-1*, -2 and -3, and restricted expression of *Tlx-1* during embryogenesis. *Development. Growth, Differentiation*, **35**, 655-663

**Thesis Supervision:** 21 graduate students (5 PhD and 8 MPhil graduated), 10 postdoc (7 completed training)**Grant Awards:**

- a) PI in 17 basic research grants, over HK\$ 16 million
- b) PI in 3 applied research grants, over HK\$ 3.7 million
- c) Co-I of Two Area of Excellence awards, total sum is HK\$ 75 million, my share is 5 millions

**Invention Awards**2006 Silver Award, the 16<sup>th</sup> National Exhibitions of Innovations, China2007 Gold Medal, the 35<sup>th</sup> International Exhibition of Inventions, New Techniques and Products of Geneva

2009 Gold award and also Firi award for Best Invention, Korean International Women's Invention Exposition

2010 Gold award and also Special Prize form Federation of Korean Industries, Korean International Women's Invention Exposition

**Journal Editorial Board Membership:** Developmental Dynamics (Wiley), Nanomedicine: Nanotechnology, Biology and Medicine (Elsevier), **Service as grant reviewer:** 2 local (RGC & Baptist U) and 2 overseas (US Northwest Health Foundation, UK Wellcome Trust), **Board of Directors membership:** Nano and Advanced Materials Institute Ltd, Hong Kong, **Fellow of the Royal Society of Medicine** since 2009