Curriculum Vitae

Name: Sun Jae Kwon

Position: Managing Director / Encell Inc.

Professional Carrier

2010.01 ~ 2018.10	MEDIPOST Co., Ltd, Biomedical Research Institute, Team leader
2018.10 ~ 2020. 01.	ExoCoBio Inc. 1st R&D Institute, Director
2020.02 ~ 2021.05	Monit Cell, Director
2021.05 ~ present	Encell Inc. Process Development Research Institute, Managing Director

Current Works

1. Process Development for Massive Production of Cell Therapy Product
2. Process Development of Virus Production
3. Development of Productivity and Potency Enhancement Technology

Major Skills

1. Process Development for Stem Cell Therapy
2. Mass Manufacturing system and Potentiation of stem cell
3. Formulation Development for Stem Cell Therapy

Major Interest

1. Process Development for Stem Cell Therapy
2. Mass manufacturing system and Potentiation of stem cell
3. Formulation Development for Stem Cell Therapy

4. GMP, non-clinical/Clinical trial
5. Quality by Design

Educational Background

2003.2-2010.2 Ph.D. in Molecular Biology, Department of Life Science,
Gwangju Institute of Science and Technology (GIST), Gwangju, Korea

1998.3-2000.2 M.S. in Cellular Biology, Department of Life Science
Gwangju Institute of Science and Technology (GIST), Gwangju, Korea

1994.3-1998.2 B.S. in Molecular Biology, Department of Biological Science
Korea Advanced Institute of Science and Technology (KAIST), Daejeon, Korea

Awards and Honors:

1994-1998 Korea Advanced Institute of Science and Technology scholarship

Publications

12. Choi W, **Kwon SJ**, Jin HJ, Jeong SY, Choi SJ, Oh W, Yang YS, Jeon HB, Jeon ES. Optimization of culture conditions for rapid clinical-scale expansion of human umbilical cord blood-derived mesenchymal stem cells. *Clin Transl Med*. 2017;6(1):38.
11. Lee M, Jeong SY, Ha J, Kim M, Jin HJ, **Kwon SJ**, Chang JW, Choi SJ, Oh W, Yang YS, Kim JS, Hong Bae Jeon. Low immunogenicity of allogeneic human umbilical cord blood-derived mesenchymal stem cells in vitro and in vivo. *Biochem Biophys Res Commun*. 2014;446(4):983-9.
10. Jeong SY, Kim DH, Ha J, Jin HJ, **Kwon SJ**, Chang JW, Choi SJ, Oh W, Yang YS, Kim G, Kim JS, Yoon JR, Cho DH, Jeon HB. Thrombospondin-2 secreted by human umbilical cord blood-derived mesenchymal stem cells promotes chondrogenic differentiation. *Stem Cells*. 2013;31(10):2136-48.

9. Jin HJ, Bae YK, Kim M, **Kwon SJ**, Jeon HB, Choi SJ, Kim SW, Yang YS, Oh W, Chang JW. Comparative analysis of human mesenchymal stem cells from bone marrow, adipose tissue, and umbilical cord blood as sources of cell therapy. *Int. J. Mol. Sci.* 2013;14(9): 17986-18001.

8. **Kwon SJ**, Kim DH. Characterization of junctate-SERCA2a interaction in murine cardiomyocyte. *Biochem Biophys Res Commun.* 2009;390(4):1389-94.

7. Cho JH, Song HO, Singaravelu G, Sung H, Oh WC, **Kwon S**, Kim do H, Ahnn J. Pleiotropic roles of calumenin (calu-1), a calcium-binding ER luminal protein, in Caenorhabditis elegans. *FEBS Lett.* 2009;583:3050-6.

6. **Kwon SJ**, Hong CS, Cho MC*, et al.*, Overexpression of junctate induces cardiac hypertrophy and arrhythmia via altered calcium handling. *J Mol Cell Cardiol.* 2008;44:672-82.

5. Hong CS, **Kwon SJ**, Kim DH. Multiple functions of junctin and junctate, two distinct isoforms of aspartyl beta-hydroxylase. *Biochem Biophys Res Commun.* 2007;362:1-4

4. Lee EH, Rho SH, **Kwon SJ***, et al.*, N-terminal region of FKBP12 is essential for binding to the skeletal ryanodine receptor. *J Biol Chem*. 2004;279:26481-8.

3. **Kwon SJ**, Song WK, Park CS, Ahnn J. Characterization of a novel gene expressed in neuromuscular tissues and centrosomes in Caenorhabditis elegans. *Cell Biochem Funct.* 2001;19:79-88.

2. Kim SM, Kim DS, Jung CH, Kim DH, Kim JH, Jeon HB, **Kwon SJ**, Jeun SS, Yang YS, Oh W, Chang JW. CXC chemokine receptor 1 enhances the ability of human umbilical cord blood-derived mesenchymal stem cells to migrate toward gliomas. *Biochem Biophy Res Commun.* 2011;407:741-6.

1. Kim JY, Kim DH, Kim JH, Lee D, Kim SM, Jeon HB, **Kwon SJ**, Choi SJ, Lee EH, Yoo YJ, Seo SW, Lee JI, Na DL, Yang YS, Oh W, Chang JW. Soluble intracellular adhesion molecule-1 secreted by human umbilical cord blood-derived mesenchymal stem cell reduces amyloid β plaques. *Cell Death & Differ.* 2012;19(4):680-91.

Patents

2. “Method for culturing mesenchymal stem cells according to cell size.” Yang, Y.S.; Oh, I.L.; Jin, H.J.; **Kwon, S.J.**; Kim, M.Y. Korea Patent 1015489560000 (2015) & Australia AU2014315919B8 (2017) & Spain patent ES2690071T3 (2018) & European patent EP3041930B1 (2018) & United States patent US10150950B2 (2018) & Japan patent JP6348183B2 (2018).

1. “Method for culturing mesenchymal stem cells.” Yang, Y.S.; Oh, I.L.; **Kwon, S.J.**; Lee, M.Y.; Jeon, H.B. Korea Patent KR101532556B1 (2015) & United States patent US9580687B2 (2017) & China patent CN104781394B (2017) & Australia patent AU2013309642B2 (2018) & Japan JP6478243B2 (2019).