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Education

- 9/04 – present** **University of Wisconsin-Madison** **Madison, WI**
Ph.D. candidate
Advisor: Eric V. Shusta
- 03/97 - 02/01** **Seoul National University** **Seoul, Korea**
Bachelor of Science in Chemical Engineering, *Summa Cum Laude*

Research Experience

- 11/04 – present** **University of Wisconsin-Madison** **Madison, WI**
Research projects:
1) Development of a yeast surface display-based antibody selection and antigen identification strategy for membrane protein analysis (with Prof. Eric V. Shusta)
- 01/01 – 06/04** **Biomedlab, Co.** **Ansan, Korea**
Research projects:
1) Development of a surface plasmon resonance based biosensor (with Texas Instruments, Dr. Jerry Elkind)
2) Designing oligonucleotide probes for HPV genotyping microarray (with Dr. Jeong-Mi Kim)

Teaching Experiences

- Teaching assistant, Transport phenomena, undergraduate level, Spring 2006.
Instructor: Prof. Michael D. Graham
- Teaching assistant, Mass transfer operations, undergraduate level, Spring 2007.
Instructor: Prof. Eric V. Shusta

Awards/Honors

- Honor Scholarship, 1999.
- Gold Medal in Biochemical Engineering Competition sponsored by Korean Institute of Chemical Engineers (KICChE), Oct., 2000.
- The Samsung Lee Kun Hee scholarship, 2004-2006.
- Polygon Engineering Council outstanding teaching assistant award, 2006-2007.
- Roland A. Ragatz award, 1st place, Spring 2007.

Publications

1. Wang, X. X., Cho, Y. K., Shusta, E. V. Mining a yeast library for brain endothelial cell-binding antibodies. *Nature methods* **4**, 143-5 (2007).
2. Cho, Y. K., Chen, I., Shusta, E. V. A yeast immunoprecipitation method for highly efficient isolation and characterization of antigens, in preparation.
3. Cho, Y. K., Pepper L. R., Boder, E. T., Shusta, E. V. Cell surface display, in High throughput screening using eukaryotic based and particle platforms, *Combinatorial Chemistry and High Throughput Screening* (invited review), in preparation.

Patents

1. Cho, Y. K., Kim, H.-J., Kim, J. K., 'Method for screening analytes using surface plasmon resonance', Korean patent application 10-2001-58777, 21 September 2001.
2. Cho, Y. K., Kim, H.-J., Kim, J. K., 'Device for screening analytes using surface plasmon resonance', Korean patent application 10-2002-56131, 30 May 2002.
3. Cho, Y. K., Kim, H.-J., Kim, J. K., 'Method and device for screening analytes using surface plasmon resonance', PCT application WO 03/025547, 27 March 2003.

Presentations

1. Cho, Y. K., Kim, J. K., Miniaturized immunosensor based on surface plasmon resonance, BioMEMS and Biomedical Nanotechnology world, September 2001, Columbus, OH.
2. Cho, Y. K., Kim, H.-J., Quantitation of biomolecules using miniaturized surface plasmon resonance sensor, Korean Institute of Chemical Engineers 2003 Fall meeting, *Theories and Applications of Chem. Eng.*, Vol. 9, No. 1, pp. 498-451, (2003).
3. Cho, Y. K., Wang, X. X., Shusta, E. V. An antibody selection and antigen identification strategy for membrane protein analyses, 2nd Annual Human Proteomics Symposium, June 2007, Madison, WI.
4. Cho, Y. K., Wang, X. X., Shusta, E. V., Yeast antibody display technology for efficient targeting and isolation of BBB biomarkers, 7th Cerebral Vascular Biology International Conference, June 2007, Ottawa, Canada.