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EDUCATION

Ph.D. in Pharmaceutics, Purdue University, West Lafayette, IN, December 2003.

M.S. in Microbial Chemistry, Seoul National University, Seoul, Korea, February 1995.

B.S. in Pharmacy, Seoul National University, Seoul, Korea, February 1993.

PROFESSIONAL EXPERIENCE

Assistant Professor, Departments of Industrial and Physical Pharmacy and Biomedical Engineering, Purdue University, West Lafayette, IN. January 2007 – present.

Postdoctoral Research Associate, Department of Chemical Engineering, Massachusetts Institute of Technology, Cambridge, MA (Advisor: Robert Langer), April 2004 – December 2006.

Postdoctoral Research Associate, Department of Industrial and Physical Pharmacy, Purdue University, West Lafayette, IN (Advisor: Kinam Park), December 2003 – April 2004.

Research Scientist, Sam Yang Co. Ltd., Pharmaceutical R&D center, Daejeon, Korea, 1995–1999.

HONORS AND AWARDS

- 2004 AAPS Outstanding Graduate Student Research Award in Pharmaceutical Technologies.
- 2003 CRS-3M Drug Delivery Systems Graduate Student/Post-Doc Outstanding Drug Delivery Paper Award.
- 2002 First place in the poster presentation, 32nd Annual Pharmaceutics Graduate Student Research Meeting.
- 2001 Highlights of Student Posters, 28th CRS Annual Meeting and Exposition.
- 2000 Flemming Award (University scholarship), Purdue University, IN.
- 1999 Korean Government Scholarship, National Institute for International Education Development, Korea.

PUBLICATIONS

1. **Yeo, Y.**, Ito, T., Bellas, E., Highley, C.B., Marini, R., and Kohane, D.S., In situ cross-linkable hyaluronan hydrogels containing polymeric nanoparticles for preventing post-surgical adhesions. *Ann. Surg.* In press.
2. **Yeo, Y.**, Geng, W., Ito, T., Kohane, D.S., Burdick, J., and Radisic, M., A photocrosslinkable hydrogel for myocyte cell culture and injection. *J. Biomed. Mat. Res.* In press.

3. Ito, T., Fraser, I.P., **Yeo, Y.**, Highley, C.B., Langer, R., and Kohane, D.S. Anti-inflammatory function of an in-situ cross-linkable conjugate hydrogel of hyaluronic acid and dexamethasone. *Biomaterials*. In press.
4. Ito, T., **Yeo, Y.**, Highley, C.B., Bellas, E., Benitez, C., and Kohane, D.S. The prevention of peritoneal adhesions by in-situ cross-linking hydrogels of hyaluronic acid and cellulose derivatives. *Biomaterials*. (2007) 28: 975-983.
5. Jia, X., **Yeo, Y.**, Clifton, R.J., Jiao, T., Kohane, D.S., Kobler, J., Zeitels, S.M., and Langer R. Hyaluronic Acid-Based Microgels and Microgel Networks for Vocal Fold Restoration. *Biomacromolecules*.(2006) 7(12) 3336-3344.
6. Karp, J.M.*, **Yeo, Y.***, Geng, W., Cannizarro, C., Yan, K., Kohane, D.S., Vunjak-Novakovic, G., Langer, R., and Radisic, M. A photolithographic method to create cellular micropatterns. *Biomaterials*. (2006) 27(27) 4755-4764. (* authors contributed equally)
7. Fukuda, J., Khademhosseini, A., **Yeo, Y.**, Yeh, J., Yang, X., Eng, G., Wang, C.-F., Kohane, D.S., and Langer, R. Micromolding of photocrosslinkable chitosan hydrogel for spheroid microarray and co-cultures. *Biomaterials*. (2006) 27(30): 5259-5267.
8. **Yeo, Y.**, Highley, C.B., Bellas, E., Ito, T., Marini, R., Langer, R., and Kohane, D.S., In situ cross-linkable hyaluronic acid hydrogels prevent post-operative abdominal adhesions in a rabbit model. *Biomaterials*. (2006) 27(27): 4698-4705.
9. **Yeo, Y.**, Burdick, J.A., Highley, C.B., Marini, R., Langer, R., and Kohane, D.S., Peritoneal application of chitosan and UV-cross-linkable chitosan. *J. Biomed. Mater. Res.* (2006) 78A(4): 668-675.
10. Kohane, D.S., Tse, J.Y., **Yeo, Y.**, Padera, R., Shubina, M., Langer, R., Biodegradable polymeric microspheres and nanospheres for drug delivery in the peritoneum. *J. Biomed. Mater. Res.* (2006) 77A(2): 351-361.
11. **Yeo, Y.**, Bellas, E., Firestone, W., Langer, R., and Kohane, D.S., Complex coacervates for thermally sensitive controlled release of flavor compounds. *J. Agric. Food Chem.* (2005) 53(19): 7518-7525. (* Received news recognition in August 24, 2005 issue of Institute of Food Technologists Weekly Newsletter.)
12. Park, J.H., Ye, M., **Yeo, Y.**, Lee, W.K., Paul, C., and Park, K., Reservoir-Type Microcapsules Prepared by the Solvent Exchange Method: Effect of Formulation Parameters on Microencapsulation of Lysozyme. *Molecular Pharmaceutics*. (2006) 3(2): 135-143.
13. **Yeo, Y.** and Park, K., A new microencapsulation method using an ultrasonic atomizer based on interfacial solvent exchange. *J. Controlled Release* (2004) 100(3): 379-388.

14. **Yeo, Y.** and Park, K., Characterization of reservoir-type microcapsules made by the solvent exchange method. *AAPS PharmSciTech* (2004) 5(4): article 52.
15. **Yeo, Y.**, Chen, A.U., Basaran, O.A., and Park, K., Solvent exchange method: a novel microencapsulation technique using dual microdispensers. *Pharm. Res.* (2004) 21(8): 1419-1427. Cover page.
16. **Yeo, Y.** and Park, K., Control of encapsulation efficiency and initial burst in polymeric microparticle systems. *Arch. Pharmacol Res.* (2004) 27(1): 1-12.
17. **Yeo, Y.**, Basaran, O.A. and Park, K., A new process for making reservoir-type microcapsules using ink-jet technology and interfacial phase separation. *J. Controlled Release* (2003) 93(2): 161-173.
18. **Yeo, Y.**, Baek, N. and Park, K., Microencapsulation methods for delivery of protein drugs. *Biotechnol. Bioprocess Eng.* (2001) 6: 213-230.

Book Chapters

1. **Yeo, Y.** and Park, K. A new microencapsulation technique based on the solvent exchange method (Chapter 17). In: Svenson, S. (Ed.), *Polymeric Drug Delivery I - Particulate Drug Carriers*, ACS Symposium Series, Vol. 923, American Chemical Society, Washington, DC. 2006: 448 pp
2. Lee, S.C., **Yeo, Y.** and Park, K. Albumin modification. In: Ma, P.X. and Elisseeff, J. (Eds.), *Scaffolding in Tissue Engineering*. Taylor & Francis. 2005: 283-299
3. **Yeo, Y.** and Park, K. Recent advances in microencapsulation technology. In: *Encyclopedia of Pharmaceutical Technology*. Marcel Dekker, Inc. 2005: E-EPT-120028567
4. **Yeo, Y.** and Park, K., Microencapsulation of protein drugs: a novel approach. In: Wise, D.L., Hasirci, V., Lewandrowski, K.-U., Yaszemski, M.J., Altobelli, D.E. and Trantolo, D.J. (Eds.), *Biomaterials handbook—Advanced applications of basic sciences and bioengineering*. Marcel Dekker, Inc. 2004: 305-332

Manuscripts Submitted

1. **Yeo, Y.** and Kohane, D.S. Polymers in the prevention of peritoneal adhesions. Submitted to *Eur. J. Pharm. Biopharm.*
2. **Yeo, Y.**, Bellas, E., Highley, C.B., Langer, R., and Kohane, D.S. Peritoneal adhesion prevention with an in situ cross-linkable hyaluronan gel containing tissue-type plasminogen activator. Submitted to *Annals of Surgery*.

Book Review

Microdrop Generation (Eric R. Lee. CRC Press, Boca Raton, FL. 2003. 252 pp.) for *Pharmaceutical Research* (2003) 20(12): 2048-2049.

Patents

1. Park, K., **Yeo, Y.**, 2004. Microencapsulation using ultrasonic atomizers, United States Patent 6,767,637.
2. **Yeo, Y.**, Chen, A.U., Basaran, O.A. and Park, K., 2003. Microencapsulation of drugs by solvent exchange, United States Patent 6,599,627.
3. Lee, H.H., Cho, J.W., Kim, C.Y., Song, J.D., Park, C.M., Yoon, H.J., **Yeo, Y.**, Paick, J.S. and Pai, C.M., 1996. Transdermal drug delivery device for treating erectile dysfunction. PCT Int. Appl. 9632141.

Proceedings

1. Jia, X., **Yeo, Y.**, Clifton, R.J., Jiao, T., Kohane, D.S., Kobler, J.B., Zeitels, S.M., Langer, R.: Hyaluronic acid-based microgels for vocal fold regeneration. *Polymer Preprints* 47(2): 67-68, 2006.
2. Park, J.H., Ye, M., **Yeo, Y.**, Paul, C., Choi, D.K., and Park, K.: Solvent exchange method for microencapsulation of protein drugs: Size control of microcapsules bearing lysozyme as a model protein., *Proc. Intern. Symp. Control. Rel. Bioact. Mater.*, 32: #434, 2005.
3. Park, J.H., Ye, M., Lee, W.K., **Yeo, Y.**, Paul, C., Choi, D.K., and Park, K.: Microcapsule preparation based on the solvent exchange method implemented by the ultrasonic atomizer system. *Proceedings of the 12th International Symposium on Recent Advances in Drug Delivery Systems*. p.164-165, Salt Lake City, UT, February 21-24, 2005.
4. Park, K. and **Yeo, Y.**: The solvent exchange method using an ultrasonic atomizer. *Proc. Intern. Symp. Control. Rel. Bioact. Mater.*, 31: #363, 2004.
5. Paul, C., **Yeo, Y.**, Gregori, G., Robinson, J.P., and Park, K., Flow cytometric microencapsulation. *Proc. Intern. Symp. Control. Rel. Bioact. Mater.*, 31: #126, 2004.
6. Park, K., **Yeo, Y.**, and Basaran, O.A.: Novel microencapsulation techniques based on the solvent exchange method, *Pharmaceutical Sciences World Congress (PSWC2004)*. 2nd World Congress of the Board of Pharmaceutical Sciences of FIP, 2: 51a-51b, 2004.
7. **Yeo, Y.** and Park, K.: New microencapsulation technique using an ultrasonic atomizer based on the solvent exchange method. *PMSE Preprints* 89: 143-144, 2003.
8. **Yeo, Y.**, Chen, A.U., Basaran, O.A., and Park, K.: Solvent exchange method using an ink-jet nozzle system: Control of microcapsule size. *Proc. Intern. Symp. Control. Rel. Bioact. Mater.*, 30: #342, 2003.
9. **Yeo, Y.**, Cho, Y.W., and Park, K.: Biomimetic materials. *Proc. Intern. Symp. Control. Rel. Bioact. Mater.*, 30: #49, 2003.

10. **Yeo, Y.**, Chen, A.U., Basaran, O.A., and Park, K.: Solvent Exchange Method: A New Process for Making Reservoir-Type Microcapsules. Proceedings of the 11th International Symposium on Recent Advances in Drug Delivery Systems. #001, Salt Lake City, UT, March 3-6, 2003.
11. **Yeo, Y.**, Chen, A.U., Basaran, O.A., and Park, K.: Solvent exchange method: A novel microencapsulation technique. Proc. Intern. Symp. Control. Rel. Bioact. Mater., 29: 547-548, 2002.
12. **Yeo, Y.**, Kim, B.Y., Kim, J.D., Chen, A.U., Basaran, O.A. and Park, K.: Solvent exchange method: Variables for process optimization. Proc. Intern. Symp. Control. Rel. Bioact. Mater., 29: 549-550, 2002.
13. **Yeo, Y.** and Park, K.: Solvent exchange method: a novel microencapsulation process for protein delivery. Proc. Intern. Symp. Control. Rel. Bioact. Mater., 28: 928-929, 2001.

ABSTRACTS AND PRESENTATIONS

1. **Yeo, Y.**, Kohane, D.S., and Langer, R.: Post-surgical adhesion prevention. Podium presented at the DuPont MIT Alliance Student Symposium, Cambridge, MA, United States, September 25, 2006.
2. **Yeo, Y.**, Highley, C.B., Bellas, E., Ito, T., Marini, R., Langer, R., and Kohane, D.S., In situ cross-linkable hyaluronic acid hydrogels prevent post-operative abdominal adhesions in a rabbit model. AAPS National Biotechnology Conference, Boston, MA, United States, June 18-21, 2006
3. **Yeo, Y.**, Burdick, J.A., Highley, C.B., Marini, R., Langer, R., and Kohane, D.S., Peritoneal application of chitosan and UV-cross-linkable chitosan. 8th US-Japan Symposium on Drug Delivery Systems, Maui, HI, United States, December 18-23, 2005.
4. Radisic, M., **Yeo, Y.**, and Geng, W. A simple method for fabrication of patterned cell arrays using photocrosslinkable chitosan. 2005 Materials Research Society Fall Meeting, Abstract K5.25, Boston, MA, United States, November 28-December 2, 2005.
5. **Yeo, Y.**, Burdick, J., Geng, W., and Radisic, M. Injectable Hydrogel Blend for Regeneration of Infarcted Myocardium. 2005 Materials Research Society Fall Meeting, Abstract J3.20, Boston, MA, United States, November 28-December 2, 2005.
6. Paul, C., Lee, S., **Yeo, Y.**, Grégori, G., Robinson, J.P., and Park, K.: Flow cytometric microencapsulation, American Association of Pharmaceutical Scientists Annual Meeting & Exposition, The AAPS Journal, 7(S2), Abstract R6113, Nashville, TN, United States, November 6-10, 2005.
7. **Yeo, Y.**, Kohane, D.S., and Langer, R.: Post-surgical adhesion prevention. Podium presented at the DuPont MIT Alliance Student Symposium, Cambridge, MA, United States, September 20, 2005.

8. Park, J.H., Ye, M., **Yeo, Y.**, Lee, W.K., Paul, C., Choi, D., and Park, K.: Reservoir-type microcapsules for protein delivery: Optimization of the fabrication condition. 30th Annual Meeting and Exhibition of Society for Biomaterials. Abstract #585, Memphis, TN, United States, April 27-30, 2005.
9. Park, J.H., Ye, M., **Yeo, Y.**, Lee, W.K., and Park, K.: Size-controlled reservoir-type microcapsules prepared by the solvent exchange method. 229th ACS National Meeting, BIOT-212, San Diego, CA, United States, March 13-17, 2005.
10. Park, J.H., **Yeo, Y.**, Ye, M., and Park, K.: Microencapsulation of lysozyme using the solvent exchange method: Effect of sugar and salt concentration on the particle size. American Association of Pharmaceutical Scientists Annual Meeting and Exposition, Abstract # W4038, Baltimore, MD, United States, November 7-11, 2004.
11. **Yeo, Y.** and Park, K.: Characterization of reservoir-type microcapsules made by the solvent exchange method. An abstract and poster presented at the 2004 American Association of Pharmaceutical Scientists Annual Meeting and Exposition, Abstract # T2161, Baltimore, MD, United States, November 7-11, 2004.
12. **Yeo, Y.**, Kohane, D.S., and Langer, R.: Controlled drug delivery for post-surgical adhesion prevention. Podium presented at the DuPont MIT Alliance Student Symposium, Cambridge, MA, United States, October 13, 2004.
13. Park, K. and **Yeo, Y.**: The solvent exchange method using an ultrasonic atomizer. An abstract and poster presented at the 31th Annual Meeting of the Controlled Release Society, Honolulu, Hawaii, United States, Abstract # 363, June 12-16, 2004.
14. Park, K. and **Yeo, Y.**: Solvent exchange method: A new microencapsulation technique. An abstract and podium presented at the 227th ACS National Meeting, Anaheim, CA, United States, BIOT-381, March 28-April 1, 2004.
15. Paul, C., **Yeo, Y.**, Chen, A.U., Basaran, O.A., and Park, K.: Microencapsulation of protein drugs using the solvent exchange method. 2003 American Association of Pharmaceutical Scientists Annual Meeting and Exposition, Abstract # W4165, Salt Lake City, UT, United States, October 26-30, 2003.
16. **Yeo, Y.** and Park, K.: Process parameters involved in a new microencapsulation technique based on the solvent exchange method. An abstract and poster presented at the 2003 American Association of Pharmaceutical Scientists Annual Meeting and Exposition, Abstract # W4206, Salt Lake City, UT, United States, October 26-30, 2003.
17. **Yeo, Y.** and Park, K.: New Microencapsulation Technique Using an Ultrasonic Atomizer Based on the Solvent Exchange Method. An abstract and podium presented at the 226th ACS National Meeting, PMSE-094, New York, NY, United States, September 7-11, 2003.

18. **Yeo, Y.**, Cho, Y.W. and Park, K.: Biomimetic materials. An abstract and podium presented at the 30th Annual Meeting of the Controlled Release Society, Abstract #049, Glasgow, United Kingdom, July 19-23, 2003.
19. **Yeo, Y.**, Chen, A.U., Basaran, O.A. and Park, K.: Solvent exchange method using an ink-jet nozzle system: Control of microcapsule size. An abstract and poster presented at the 30th Annual Meeting of the Controlled Release Society, Abstract #342, Glasgow, United Kingdom, July 19-23, 2003.
20. **Yeo, Y.**, Chen, A.U., Basaran, O.A. and Park, K.: Solvent exchange method: A novel microencapsulation technique using dual microdispensers. An abstract and podium presented at the 33rd Annual Pharmaceutics Graduate Student Research Meeting, Chicago, IL, 2003.
21. **Yeo, Y.**, Chen, A.U., Basaran, O.A. and Park, K.: Solvent exchange method: A novel microencapsulation technique. An abstract and poster presented at the 29th Annual Meeting of the Controlled Release Society, Abstract #294, Seoul, Korea, July 20-25, 2002.
22. **Yeo, Y.**, Kim, B.Y., Kim, J.D., Chen, A.U., Basaran, O.A. and Park, K.: Solvent exchange method: Variables for process optimization. An abstract and poster presented at the 29th Annual Meeting of the Controlled Release Society, Abstract #295, Seoul, Korea, July 20-25, 2002.
23. **Yeo, Y.**, Chen, A.U., Basaran, O.A. and Park, K.: Solvent exchange method: A novel microencapsulation technique. An abstract and poster presented at the 32nd Annual Pharmaceutics Graduate Student Research Meeting, Omaha, NE, 2002.
24. **Yeo, Y.** and Park, K.: Solvent exchange method: a novel microencapsulation process for protein delivery. An abstract and poster presented at the 28th International Symposium on Controlled Release of Bioactive Materials and 4th Consumer & Diversified Products Conference, Abstract #6159, San Diego, CA, United States, June 23-27, 2001.

INVITED LECTURE

Nanoencapsulation of omega-3 fatty acids, Pepsi-Cola Company, Valhalla, NY, June 29, 2005.

MANUSCRIPT REVIEWS

Pharmaceutical Research; Journal of Controlled Release; Langmuir; Journal of Agricultural and Food Chemistry; Journal of Biomedical Materials Research; AAPS PharmSciTech; PNAS; Angewandte Chemie International Edition.

PROFESSIONAL MEMBERSHIPS

Rho Chi Pharmacy Honor Society

Controlled Release Society (2001-Present)

American Association of Pharmaceutical Scientists (2002-Present)

American Chemical Society (2003-2004)