

RESUME

Personal Information

Name in Full : Nam, Ki-Hwan
University : Graduate School of bioengineering, University of Illinois at Chicago
Seeking Degree : Ph. D.
Date of birth : June 11, 1975
Address : 1212 S. Michigan Ave. #2704, Chicago, IL 60605
Tel : 312-949-1794
E-mail : namkihwan@hotmail.com, knam2@uic.edu

Academic Background

09. 2006 ~ Present

Ph. D. of Bioengineering

- The Graduate School of University of Illinois at Chicago
- Biological Microsystems laboratory

03. 2003 ~ 09. 2005

Research Assistance at Engineering Research Center (ERC)

- Appointed by Center for Advanced Bioseparation Technology

03. 2003 ~ 02. 2005

Master of biological Engineering

- The Graduate School of Inha University
- BioMEMS Lab affiliated with Bio-Nanoprocessing Laboratory

03. 1996 ~ 02. 2003

Bachelor of Science

- College of Engineering at Inha University
- Major : Chemical, Polymer and Biological Engineering

Research Experience

08. 2006 ~ Present

Research assistance (RA) at Biological Microsystems Lab in Department of Bioengineering, UIC

- Director : Prof. David T. Eddington
- Researches in the field of Bio-Nano tech. and BioMEMS, especially cell culture by using microfabricated multiwell platform, and size-based particle separation in a multilayered microfluidic devices

03. 2006 ~ 06. 2006

Research Worker at KITECH (Korea Institute of Industrial Technology)

- Team Director : Kim, Jong-Mo
- Researches in the field of application of optical fibers

03. 2003 ~ 09. 2005

Research assistance (RA) at Center for Advanced Bioseparation Technology

- Director : Prof. Koo, Yoon-Mo
- Appointed Research Laboratory by Science Foundation of Inha University
- Supported by Korea Science Foundation
- Researches in the field of BioMEMS, especially in integrating separating technology into microfluidic devices and lap-on-a-chip
- Acquisition of cultivating technology of CHO K-1 cell
- Acquisition of Lab-on-a-chip producing technology
- Acquisitions of how to use analyze instruments like HPLC, LC, etc.

06. 2004

- Participated in cGMP theory instruction
- Head : Prof. Jung Woo Choi
- Manpower development agency for Biological Electronics Engineering in Sogang University

04. 2004

Participated in Biosensor, Biochip Seminar

- Head : Prof. Jung Woo Choi
- Manpower development agency for Biological Electronics Engineering in Sogang University

10. 2003

Participated in Lab-on-a-chip (BioMEMS) Seminar

- MicroBiochip Center in Hanyang University, Korea
- Head : Prof. Eun Kyu Lee
- Supported by the Ministry of Commerce, Industry and Energy
- Instruction about biochip (Introduction, Achievement, Manufacturing process)

Extracurricular

Community Service

- 2002 ~ 2003, St. Michael Social Service Center
 - Assistant Teacher of special fine-art class for mentally retarded students
 - Counselor for Teenagers
 - Service for old people who received public assistance
- 05. 2008 ~ 05. 2009, University of Illinois at Chicago
 - Director of Korean Graduate Students Association (KGSA) at UIC
- 01. 2009 ~ 01. 2010, Korean-American Scientists and Engineers Association (KSEA)
 - Staff of KSEA, Midwest chapter

Studies Abroad for English

- 09. 2000 ~ 06. 2001 Embassy CES NY, USA : ESL Course
- 03. 2001 ~ 06. 2001 St. Jones University, NY, USA : Business Economics Class

Military Service

- 01. 1997 ~ 03. 1999
- Charging of Land-surveying at Republic of Korea Army

Leadership

- President of Korean Graduate Students Association (KGSA) at UIC
- Staff of Korean-American Scientists and Engineers Association, Midwest Chapter
- A guidance teacher at St. Michael Social Service Center
- President of Alumni Association for Daeduk High School (Deajoen) in Inha University
- President of Student's union of Daeduk High School in Deajeon

Honors and Awards

09. 2006 ~ Present

Assistantships with Tuition and fee waiver

Department of Bioengineering at Graduate School of University of Illinois at Chicago

Teaching Assistant – Fall semester, 2006, and Spring semester, 2009

Research Assistant – Spring, summer, and Fall semester, 2007 and 2008

03. 2003 ~ 09. 2005

Research Assistant

Center for Advanced Bioseparation technology

03. 2003 ~ 02. 2005

Assistantships

Department of Bioengineering at Graduate School of Inha University

Laboratory Assistant – 1st Semester, 2003

Teaching Assistant – 2nd Semester, 2003

Research Assistant – 1st and 2nd Semester, 2004

03. 2003 ~ 02. 2005

Half-expense Scholarship

Entered Department of Biological Engineering at Graduate School of Inha University

03. 1996 ~ 02. 2003

3 times of Scholarship for Academic Excellence

Department of Biological Engineering at Inha University

Research Accomplishment

Reported Thesis

- Chiral separation using circularly polarized light in the polarimetric detection system : 10. 2003 Fall Korea Biological Engineering Society
- Separation of animal cells in microfluidic device using aqueous two-phase extraction : 10. 2004 Fall Korea Biological Engineering Society
- Fractionation of mammalian cells to continuous-flow process in microfluidic devices : 11. 2004, APCE,
- Continuous-flow fractionation of mammalian cells in microfluidic devices : 05. 2005, APBioChEC
- High throughput hypoxia, Catalyzing collaboration between industry and academia in the life sciences : Baxter Healthcare, 03, 2007
- Independent control of oxygen concentration for cell culture in a multiwell format : 04, 2007, Graduate Student Forum at UIC, 2007
- Independent control of gas concentration for cell culture in an add-on platform for multiwell plates : MBEC 2008, IIT
- Independent control of oxygen concentration for cell culture in an add-on insert platform for multi-well plates : Graduate Student Forum at UIC, 2008
- Size-based bacterial separation in a multilayered microfluidic device : BMES 2008, St. Louis
- Independent control of gas concentration in an add-on insert platform for cell culture : BMES 2008, St. Louis
- Independent control of oxygen concentration for cell culture in an add-on insert platform for multi-well plates : MicroTAS 2008, SanDiego

Published Thesis

- 'Separation of animal cells(CHO K-1) in microfluidic device using continuous-flow aqueous two-phase extraction' : Graduation Thesis
- 'Continuous-flow fractionation of animal cells in microfluidic devices using aqueous two-phase extraction,' published in BioMedical MicroDevices (2005-c-BMMD05_7(3))

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- 'Independent control of oxygen concentration for cell culture in a multiwell format,'

In progress

- 'Size-based bacterial separation in a multi-layered microfluidic device,' published at
JofMEMS