

Name: Seong-Hee Ko

Date of Birth: 06. 25. 1973.



Address: Seong-Hee Maria Ko PhD

Current Position

a. Visiting Professor; Mar. 3, 2009- present

Major in Food Science and Nutrition College of Human Ecology
Sookmyung Women's University Seoul, Korea
Cheongpa-ro 47-gil 100, Yongsan-gu, Seoul, Korea , 140-472

- Involved in lecturing advanced nutrition, advanced biochemistry, nutrition & cancer and advanced metabolism for Master and Doctoral level and Life cycle nutrition for Bachelor

b. Head : June. 18, 2019- present

Research Department of Ho-Youn Kim's Clinic for Arthritis Rheumatism
Kangnam-gu, Bongeunsa-ro 109-gil, 2nd Floor, Seoul 06120, Korea
<http://rheumaho.com/>

- Involved in immune imbalance study in rheumatoid patients, measurement of cytokine in patients' blood and CD 4 positive T cell studies.
- Involved in measurement of cytokine level according to disease progression-IL-6, IL-17A and IFN-gamma were measured and studied using megapix assay.
- Involved in autoimmune disease research and immune regulation mechanism study using PBMC (Peripheral blood mononuclear cells)

External Research Grants

<History of projects>

* Project name: Antioxidative action of the fruit and vegetables consuming by Koreans.

Scholarship organization: Federation of Korean Gerontological Societies

Project period: May 15 – Dec 5, 2001

* Project name: Study on the formation of 8-hydroxyguanine by r-irradiation, cellular Dysfunction, and Role of Repair Enzyme of Oxidative DNA damage.

Project organization: Ministry of Education, Science and Technology

Project period: Apr 1, 2001 – Mar 31, 2003

* Project name: Studies on anti-diabetic action of 8-oxo- deoxyguanosine, I got the international patent of ‘A composition for treating diabetes millitus’; application number: **10-2009-0005121**, Jan. 2009 -Received the scholarship worth 100 million won from the Korea Research Foundation

* Project name: The development of an ointment medicine of atopic dermatitis using 8-oxo-deoxyguanosine (8-oxo-dG)

Scholarship organization: Seoul city; Department of patented technology commercialization

Project period: Dec.1, 2009 – Oct 31, 2011

Previous Position

a. **Research Professor; Aug. 2016 – Sep. 2017.**

Dep't of Food and Bio-technology college of BioNano technology Gachon University 432 Yeeum Hall, 1342 Seongnam-Daero, Sujeong-Gu, Seongnam-Si, Gyeonggi-Do, Korea

- Involved in lecturing Food Toxicology for Master level.

b. **Head; Aug. 2016 – Sep. 2017.**

Cell Activation Research institute , 24, Dunchon-daero 388beon-gil, Jungwon-gu, Seongnam-si, Gyeonggi-do, Korea

- Involving in developing functional foods; Typical cordyceps militaris is a medicinal mushroom that grows on dead body of insects. It lives inside dead insects during winter and sprouts into a mushroom during summer. It is known to contain active compounds such as polysaccharide and cordycepin. Our research group developed the culture method of growing cordyceps militaris on germinated soybean(GSC) instead of dead insects, using patented technologies developed by CARI(Cell Activation Research Institute).

- Involving in examine of physiological efficacy of function foods and research design-Special strain of mushroom, Phellinus linteus (Patent PDK4708), is inoculated and grown on germinated brown rice (PBR), using our proprietary technology. It contains various active compounds; polysaccharides such as beta-glucan, galactose-glucan, xilytole-glucan and GABA (Gamma-aminobutyric acid), arabinoxylan, ferulic acid, dietary fiber, tocotrienol, vitamins, and various inorganic compounds. PBR has much more these component than standard Phellinus linteus. And PBR has effect of anti-cancer, immune system improvement, liver damage suppression, anti-inflammatory activities.

c. Research Professor; 2015. June – 2016. July

Dept. of Biomedical Science, College of Life Science, CHA University
335 Pangyo-ro, Bundang-gu 526 CHA BioComplex
Seongnam-si, Gyeonggi-do, Korea 463-400

Involved in Meta-analysis: Association between metabolic syndrome and bone health

P (participant): obesity, osteoporosis

I (intervention) : Hormone Therapy

C (comparison) : None, Dose effect

O (outcomes) : formulas and doses of specific estrogen (E2 + E4)

S (study design) : Randomized controlled trial or Case controlled study

- Involved in reviewing the alteration of the lipid metabolism in post menopausal women.

d. Head ; May 19, 2014.- Feb. 7 2015

Research institute/ Life Science Institute

HyunSung Vital. Co. Ltd.

Research of balanced nutritive raw foods

Analysis of case control study of metabolic disorder disease – Diabetes, Hypertension, obesity and etc.

Research of antioxidative activity of Hydrogen water

e. Post-doctor ; Aug. 26, 2013 - Jan. 30, 2014

Division of Radiation Oncology,
Korea Institute of Radiological and Medical Sciences,
01812 75, Nowon-ro, Nowon-gu, Seoul, Korea

- Involved in Development of miRNA as radiation treatment modulator negatively regulating p53

Involved in establishment of the cell-based screening system and developed the new radiosensitizers, miRNA which acts as a p53 negative regulator.

; Effective evaluation of selected miRNAs will suggest a possibility of clinical application using this approach. Finally, the combinational therapy of miRNA and radiation treatment to cancer will provide a new application of cancer therapy.

Involved in the development of HSV vector targeting to cancer expressing CEA and EGFR.

- Involved in the establishment of the novel retargeted HSV vectors through the insertion of scFv antibodies specific for either the human carcinoembryonic antigen (CEA) or human epidermal growth factor receptor (EGFR) into gC and gD respectively.

- Involved in the examination of the entry efficiency, specificity, and oncolytic potency (in vivo) of retargeted recombinant viruses by using CEA-retargeted viruses.

f. Post-doctor; Dec. 1, 2009 - Oct. 31, 2011

Dept. Pharmacology Seoul National Univ. College of Medicine
28 Yongon-dong, Chongno-gu Seoul, Korea 110-799

- Involved in the accomplishing the project, The development of an ointment medicine of atopic dermatitis using 8-oxo-deoxyguanosine (8-oxo-dG)
Scholarship organization: Seoul city; Department of patented technology commercialization

g. Senior Researcher; Jun. 25, 2001-Feb. 26, 2009

Dept. Pharmacology Seoul National Univ. College of Medicine
28 Yongon-dong, Chongno-gu Seoul, Korea 110-799

- Involved in the metabolic study of type 2 D.M and obesity in KKAy mice (type 2 obese mice) performing RT-PCR, western blotting, and measuring of inflammatory blood parameters.
- Involved in the detection of urine 8-oxo- deoxyguanosine(8-OHdG) as an oxidative stress marker in diabetic rat using HPLC (high performance- liquid- chromatography).
- Involved in drug synthesis of 8-oxo- deoxyguanosine(8- q`

Involved in the detection of neopterin, a marker of immune response, and 8-OH-dG, a marker of oxidative stress, correlate at high age as determined by automated simultaneous HPLC analysis of human urine.

- Involved in the measuring of respiratory hexane and pentane as oxidative stress makers using GC(gas chromatography)
- Involved in the study on the formation of 8-hydroxyguanine by gamma radiationa cellular dysfunction, and role of repair enzyme(OGG1; 8-hydroxyguanine glycosylase) of oxidative DNA damage

Involved in investigating cell types and sites on p53 gene susceptible to gamma irradiation. Gamma irradiation was given to cells of various types including U937, THP, and H9, Genomic DNA was extracted and PCR performed.

- gamma radiationa cellular dysfunction, and role of repair enzyme of oxidative DNA damage in various cells

Involved in comparison of the antioxidant activities of nine different fruits in human plasma performing the measurement of ROS level in human plasma

- Involved in anti-inflammatory effects of 8-hydroxy-2'-deoxyguanosine on lipopolysaccharide-induced via Rac suppression in Balb/c mice performing animal treatment and molecular works including RT-PCR and western blotting.
- Involved in comparison of anti-oxidant activities of seventy herbs that have been used in Korean traditional medicine performing the hot water extraction of herbs scavenging effects under the various radical generation system; Hydrogen peroxide, Peroxynitrite, and Hydroxy radical.
- Involved in food safety study of the health promoting food-Sunsik of HANDOK Co. Ltd.

Involved in that interleukin-7 receptor is indispensable for proliferation and survival in Thymic $\gamma\delta T$ cell development performing cell culture and fax analysis.

- Involved in the screening works of anti-oxidant and anti-cancer foods among traditional herbal medicines, fruits and vegetables.

h. Editor/ Reviewer ; August 1, 2006 - April 14, 2012.

BAAP (*Basic and Applied Pathology*)

Basic & Applied Pathology is a joint venture between six pathology societies from the Asia-Pacific region. The multidisciplinary peer-reviewed journal aims to publish research in pathology with relevance to various settings such as the laboratory, hospital and clinic.

-Worked as editor, reviewer, administrator, production coordinator and editorial assistant in Wiley & Blackwell.

i. Post-doctor; Jun. 01, 2010-Sep. 30, 2010

Dept' of Pharmacy, Ewha Women's University.
52, Ewhayeodae-gil, Seodaemun-gu, Seoul 03760 Republic of Korea

- Invloled in the research of cholesterol homeostasis related with ABCG1, ABCA1, CD36 and SRB1 in STP induced diabetic model in the lab of Prof. Hyun-Ju Ha. Usually I accomplished various chemistry and molecular works including RT-PCT, Real-Time PCR, western blot, HPLC, GC and measurement of scavenging activity from the generation of various radicals in vivo/ vitro. Basically I have performed various biomolecule works to research lipid metabolism related with mitochondrial burning system in diabetic obese rats.

j. Visiting professor; June 2004 – Feb. 2005

Suwon Women's University of Food Science and Nutrition

1098 Juseok-ro, Hwaseong-si, Gyeonggi-do, Korea.
- Teaching Sports Nutrition for Bechloar

k. Manager of the Food Nutrition Consultancy Unit;

Newprodev Co., Ltd: research based consulting services for New product development and brand-building

Aug. 24, 2003- Aug. 21, 2004

<History of projects>

Project relating to Purette renewal of Pulmuone Co., Ltd.

New product development project of CJ Hanppuri Co., Ltd.- Commercially available

Project relating to the organic sprout vegetable development of Chungjungwon Co.,Ltd.

Rice wine development project of Kooksoondang Co., Ltd

Pudding development project of CJ Co., Ltd.

- I made it possible to enhance food's competitive edge by advising on nutritional food science factors so that the food can be superior to a manufacturing and renewal edge could be achieved over our competitors.' products at the time of manufacturing and renewal. I undertook an experimental design to enhance customer trust and make scientifically proving of the product's in question by demonstrating its excellence experimentally. I was mainly also in charge of grasping collating the food industry trends in various countries (development of foods and health care products mainly in Japan, the United States and Europe) and translating them into English and Japanese languages materials concerned.

l. Teaching Assistant of Biochemistry;

Department of Food science & Nutrition Sookmyung women's University, Seoul, Korea Master of Food science & Nutrition

Mar.3,2000– Feb.25,2002

- I prepared all chemical reagent for the experiments for the nutritional biochemistry for the

under graduated school students. I demonstrated all experiments for this class.

m. Dietician;

Hyup-Sung high school. Daegu, Korea

Mar. 13,1999–Feb.27,2000

Responsible for supplying meal for students
Involved in managing of staffs and making food tables
Preparation of Financial Statement

n. Dietician;

Daegu medical center. Daegu, Korea

Mar. 20,1998–Feb.27,1999

Responsible for supplying meal for various patients
Involved in managing of staffs and making food tables
Preparation of Financial Statement

o. Cashier and helper (part time);

Lawson, convenient mart

July 1992 .7- September 1992.9

After entering my university, I adopted gained a job of working standing for twelve hours for the first time instead of a tutor at a convenient mart. Meeting various kinds of people, I got to know the pains of blue color workers and learned a great deal about customer demand and satisfaction. learn how to satisfy the needs of customers quickly and treat their inconveniences skillfully.

Education

Department of Food science & Nutrition

Major : Food science & Nutrition

-Thesis-

Seong-Hee Ko., Effect of 8-hydroxydeoxyguanosine on obesity-associated metabolic changes in KKAY mice,

Ph.D. Dissertation, Dept. of Food Science and Nutrition, Sookmyung Women.s University.
2009. Advisor: Hyun S. Kim

Department of Food science & Nutrition

Major : Food science & Nutrition

-Thesis-

Seong-Hee Ko, A study of antioxidant action of fruits and vegetables juices, M.S. Dissertation,
Dept. of Food Science and Nutrition, Sookmyung Women.s University. 2003. Advisor: Prof.
Hyun S. Kim.

Academic distinctions

Brain Korea 21 Scholarship from Ministry of Education, KOREA

Marich 2006 – Feb. 2009

Seoul Science Fellowship from the Mayor of Seoul, KOREA
2005 - December 2007

September

Scholarship from *Department of Food science & Nutrition*
Sookmyung women's University, Soeul, Korea

May 2005.

Academic excellence Scholarship from *Department of Food science & Nutrition*
September 1996- March1997

Catholic University, Daegu, Korea

Other Merits

-ServSafe certification ;
January 2006

ServeSafe Food protection Manager Certification Examination, which is accredited by the American National Standards Institute (ANSI)-Conference for Food Protection (CFP).

Certification NO: 4698257

- International patent;

I got the the international patent of 'A composition for treating diabetes millitus'; application number: 10-2009-0005121 Jan. 2009

- Foreign language

I can speak English, Japanese, Korean and Spanish. My father was born in Osaka, Japan. His family emigrated from Japan to Korea.

I got the Spanish diplomas Delle A2.

- Gabriel Award Winner

The Gabriel Prize is awarded to outstanding volunteers who have served more than 100 times at the Raphael Clinic.



Referee

-Ho-Youn Kim, MD, Prof. CEO of Ho-Youn Kim's Clinic for Arthritis Rheumatism

{SCI Editorial Board member (International)}

- Rheumatology (Oxford) (IF: 4.171): 2002 ~ 2013
- Nature review of Rheumatology (IF: 6.448): 2005 ~present
- Autoimmunity Review (IF: 6.556): 2008 ~present
- APLAR Journal of Rheumatology (Blackwell science)(SCIE): 2002~2007
- International Journal of Clinical Rheumatology (SCIE): 2007 ~present
- Inflammation and Regeneration Journal(SCI): 2009 ~2013

{International academic activities}

- American College of Rheumatology (ACR) - member
 - APLAR (Asian-Pacific League against Rheumatism)-Chairperson, founder.
- 1998, 1999 2000, 2001, 2003, 2006, 2007
: International symposium and Congress research Award
- International Symposium of Rheumatology - Advisory board
 - Global Arthritis Research Network - member
 - The 9th World Congress on Inflammation - Scientific Advisory Board Committees
 - East-Asian Group Of Rheumatology (EAGOR)- Representative Coordinator of Korea

- Hyun Sook Kim, PhD:

Professor, Dept. of Food and Nutrition, College of Human Ecology
President, The Korean Association of Gerontology and Geriatrics
Council member, International Union of Nutritional Sciences
Major in Food and Nutrition College of Human Ecology Sookmyung Women's University
Hyochangwon-gil 52, youngsan-gu, Seoul, 140-742, Republic of Korea
Tel.: 822-710-9469
Cell: 8210-3182-0100
e-mail: hskim@sookmyung.ac.kr

- Soo Lim, MD, MPH, PHD, Dr.PH

Assistant Professor
Seoul National University Bundang Hospital
Department of Internal Medicine
300, Gumi-dong Bundang-gu, Seongnam-city, South Korea
Postal code: 463-707
E-mail: limsoo@snu.ac.kr
TEL: 82-31-787-7035
FAX: 82-31-787-4052
C.P: 010-9766-2706

-Peter Svoboda, PhD

Address : Lidvagen 11A, 17740 Jarfalla, SWEDEN
Tel: 46707123088
e-mail : peter.svoboda@gmx.com

- Seong Won Choi, PhD

Dept. Pharmaceutical Sciences
College of Pharmacy
University of New Mexico
Albuquerque, NM 87131, USA
Lab: 505-925-4318
Cell: 505-730-2907

- Chul-Jae Kim, PhD

Professor, Dean
Major in Food and Nutrition College of Human Ecology Sookmyung Women's University
Hyochangwon-gil 52, youngsan-gu, Seoul, 140-742, Republic of Korea
Tel.: 822-710-9451
Cell: 8210-6212-4804
e-mail: cjkim@sookmyung.ac.kr

- Myung-Hee Chung .MD. PhD;

Professor, Dept. Pharmacology. Seoul National Univ.
Vice-president of Seoul National Univ.
Address :28 Yongon-dong, Chongno-gu Seoul
110-799, Korea
Tel:821032789437

Fax:8227457996
e-mail: mhchung@snu.ac.kr

- Jun Kin, MD.PhD ;
Professor, Dept. Physiology, Seoul National Univ.
Managing Director of the Raphael clinic which is the free medical service for foreign immigrants.
Address : Dept. Physiology Seoul National University
College of Medicine 28 Yongon-dong,
Chongno-gu, Seoul 110-799, Korea
Tel: 821093287594
Fax: 8227410767
e-mail:97raphael@hanmail.net

Journal Publications

Seong-Hee Ko & Hyun-Sook Kim

Lipid metabolic disorders emerging from menopause and beneficial foods for postmenopausal women, Review, *Nutrients*, Manuscript ID: nutrients-643285 Received: 31 October 2019, accepted 07 Jan 2020

Seong-Hee Ko; Jin-Ku Lee; Hyun Joo Lee; Sang-Kyu Ye; Hyun-Sook Kim, Myung-Hee Chung
8-Oxo-2'-deoxyguanosine ameliorates features of metabolic syndrome in obese mice. *Biochemical and Biophysical Research Communications* 443(2), 610–616, 2014

Min-Ki Kim, Kyoung-Ho Pyo, Young-Sang Hwang, Hyang Sook Chun, Ki Hwan Park, Seong-Hee Ko, Jong-Yil Chai, Eun-Hee Shin et al
Effect of citric acid on the acidification of artificial pepsin solution for metacercariae isolation from fish, *Veterinary Parasitology* 198 (2013) 111– 115

Jin-Ku Lee¹, Seong-Hee Ko¹, Sang-Kyu Ye, Myung-Hee Chung
8-Oxo-2'-deoxyguanosine ameliorates UVB-induced skin damage in hairless mice by scavenging reactive oxygen species and inhibiting MMP expression
Journal of Dermatological Science 70 (2013) 49–57

Kyung-Rea Roh, Seong-Hee Ko, Chul-Jai Kim
Comparison of Physicochemical Properties and Antioxidative Activities of Sunflower Sprout According to Germination Day
KOREAN J. FOOD CULTURE 27(1): 66-74, 2012

Soo Lim, Min-Kyung Moon, Seong-Hee Ko, Myung-Hee Chung, Kyung-Soo Park
Effect of S-adenosylmethionine on neointimal formation after balloon injury in obese diabetic rats *Cardiovascular Research* 2011 May 1;90(2):383-93

Shin YJ, Han CS, Lee CS, Kim HS, Ko SH, Hwang SK, Ko SG, Shin JW, Ye SK, Chung MH.
Zeolite 4A, a synthetic silicate, suppresses melanogenesis through the degradation of microphthalmia-associated transcription factor by extracellular signal-regulated kinase activation in B16F10 melanoma cells. *Biol Pharm Bull.* 2010 Jan;33(1):72-6.

Peter Svoboda, Seong-Hee Ko, BeLong Cho, Sang-Ho Yoo, Seong-Won Choi, Sang-Kyu Ye, Hiroshi Kasai and Myung-Hee Chung et al;
Neopterin, a marker of immune response, and 8-OH-dG, a marker of oxidative stress, correlate at high age as determined by automated simultaneous HPLC analysis of human urine.
Analytical Biochemistry Vol. 383, p 236-242, 2008

Seong-Hee Ko, Seong-Won Choi, Sang-Kyu Ye, Myung-Hee Chung et al;
Comparison of ant-oxidant activities of seventy herbs that have been used in Korean traditional medicine
Nutrition Research and Practice Vol.2 (3), p143-151, 2008

Hee-Joon Kim, Min-Kyung Park, Seong-Hee Ko, Hyun-Sook Kim, Myung-Hee Chung et al;

Long-Term Intake of High Doses of Vitamin C Down-regulates Anti-oxidant Enzymes in Human Erythrocytes

Journal of Food Science and Nutrition Vol.13, p139-145, 2008

Seongwon Choi, Seong-Hee Ko, Myung-Hee Chung *et al*;

Anti-inflammatory effects of 8-hydroxy-2'-deoxyguanosine on lipopolysaccharide-induced via Rac suppression in Balb/c mice

Free Radical Biology & Medicine, Vol15;43(12):1594-603, 2007

Dong-Hyun Kim, Byung-Hak Yoon, Seong-Hee Ko, Sang-Kyu Ye, Myung-Hee Chung *et al*;
Interleukin-7 Receptor is Indispensable for Proliferation and Survival in Thymic $\gamma\delta T$ Cell Development

Immune Network Vol. 5, No. 1, 2005

Seong-Hee Ko, Seong-Won Choi, Sang-Kyu Ye, Myung-Hee Chung *et al*;

Comparison of the Antioxidant Activities of Nine Different Fruits in Human Plasma Journal of Medicinal food Vol. 8(1), p41-46, 2005

Thesis

Seong-Hee Ko., Effect of 8-hydroxydeoxyguanosine on obesity-associated metabolic changes in KKAY mice, Ph.D. Dissertation, Dept. of Food Science and Nutrition, Sookmyung Women's University. 2009. Advisor: Hyun S. Kim(**Council member, International Union of Nutritional Sciences**) .

Seong-Hee Ko, A study of antioxidant action of fruits and vegetables juices, M.S. Dissertation, Dept. of Food Science and Nutrition, Sookmyung Women's University. 2003. Advisor: Prof. Hyun S. Kim(**Council member, International Union of Nutritional Sciences**) .

Poster PRESENTATIONS:

Seong-Hee Ko, Hyun-Sook Kim, Myung-Hee Chung *et al*;

SCHISANDRA CHINESUS EXTRACT PREVENTS THE ELEVATION OF PLASMINOGEN ACTIVATOR INHIBITOR -1(PAI-1) IN KKAY MICE

The 1st world congress on *Controversies* in Obesity, Diabetes and Hypertension (CODHy), 2006

Berlin, Germany.

Seong-Hee Ko, Seong-Won Choi, Sang-Kyu Ye, Myung-Hee Chung *et al*;

RESPIRATORY HEXANE: A MEASURE OF IN VIVO LIPID PEROXIDATION APPLIED TO RATS FED DIETS VARYING IN AIN93 DIET WITH UNCOOKED CEREALS AND ADMINISTERED TO CARBON-TETRACHOLIDE

Free Radical Biology & Medicine. Volume 35, Supplement 1, 2003

SFRBM's 10th Annual Meeting, Seattle , WA, USA

¹Seong-Won Choi, Seong-Hee Ko, Myung-Hee Chung *et al*;

INHIBITORY EFFECT OF 8-OXO-2DEOXYGUANOSINE ON THE GROWTH OF

KG-1 MYELOSARCOMA IN BALB/C NUDE MOUSE

Free Radical Biology & Medicine. Volume 35, Supplement 1, 2003
SFRBM's 10th Annual Meeting, Seattle , WA, USA

Seong-Hee Ko, Sang-Kyu Ye, *et al.*:

Transcription factors Ets, but not Sp1, are an essential for transcriptional activation of the mouse Interleukin-2R β chain gene promoter.

The 15th Annual Meeting of the Korean Society for Molecular and Cellular Biology. ,
November, 2003

Jin-won Hyun, Seong-Hee Ko , Myung-Hee Chung *et al.*

The Role of OGG1 activity on Inducing radiation sensibility
The Korean Journal of Physiology & Pharmacology
October/ 2002 vol. 6, supplement 1

Ji-Hye Lee, Seong-Hee Ko *et al*

Human diet study showed immune regulatory function of pine needle supplementation in college students

Korean Journal of Gerontology (*November, 2001*)

Oral PRESENTATION:

Seong-Hee Ko, Hyun-Sook Kim, Myung-Hee Chung *et al.*:

Effect of 8-hydroxydeoxyguanosine on obesity-associated metabolic changes in KKAY mice
The 2nd Sookmyung Women's University Network Symposium Research Institute of
Pharmaceutical Sciences Research Institute of Women's Health
Decembr.15th 2008

Institutional Actions on Academic Record

Member; APAME (Asia Pacific Association of Medical Journal Editors) <http://apame.info/>

APAME is the Asia Pacific Association of Medical Journal Editors (APAME), established in Seoul Korea on May 5, 2008. Members include individual editors, editors' societies and those working on scientific communication from 11 countries including Australia, China, Fiji, Japan, Korea, Malaysia, Mongolia, Papua New Guinea, Philippines, Singapore and Vietnam. Officers from World Health Organization participate as an advisor or a coordinator.

In charge of translating the Japanese board as Administrator.

Member, Raphael Clinic (http://raphael.or.kr/en_US/)

- The Raphael Clinic is a medical volunteer institute which has free medical service for foreign immigrant workers in Korea. Raphael Clinic's dedication to alleviate the poor medical treatment environment for foreign workers within Korea began in April 1997 with core support from the Catholic Professor Association and CaSA (Catholic Student Association) of Seoul National University College of Medicine.

Raphael Clinic opens a free clinic for foreign workers every Sunday and treats an average of over 300 patients each time. Furthermore, Raphael Clinic also operates a Mobile Clinic which travels to regional provinces in order to reach out to foreign workers, multicultural families and North Korean refugees located in those regions. In 1996, the late Cardinal Kim, Sou Hwan received a letter from two Pakistani workers, Amir Zamir and Mohammad Aziz, who had been falsely charged for murder and given the death sentence. Cardinal Kim did not dismiss their

aggrieved cry for justice, and urged the Catholic Human Rights Committee to investigate the matter closely. This trigger opened the cardinal's eyes to the severe human rights violations faced by foreign workers, and as he continued to provide support for the accused men to be pardoned, he also kept a special place in his heart for Raphael Clinic which worked to take care of the health of foreign workers within our country.

I have been interpreting English, Japanese, Spanish for people from the Philippines, Japan, Malaysia, Indonesia, Nepal, Burma, Peru, China and Africa over 350 hours since 2007 in the transfer team introducing secondary medical care.

Member, Michael Nanum (<http://cafe.naver.com/michaelnanum>)

Founded in 2011, Michael Nanum serves to help people suffering from starvation in Africa. according to **Matthew 14, 16, "Give them some food yourselves."**

Michael Nanum is a catholic laity association, our members consist of various people transcending religions. The members of Michael Nanum not only donate to the hunger but also take part in active supports- running permanent shop(second hand shop), flea market, and holding music performances to help the hunger. Michael Nanum has donated over 900000 \$(one-hundred million Won) to Caritas Korea up to now and annually donates over 2000\$ to help the hungry.

July first in 2014, Michael Nanum was finally approved as formal catholic laity association by Andrew Yeon-Soo Jung Cardinal archdiocese of Seoul. Thus, Michael Nanum came to be supported by archdiocese of Seoul according to the article 298-310, 321-329 of canon law.

Educational experience

Teaching of students

a. Sookmyung Women's University of Food Science and Nutrition

Length of time

Period: *Feb 2009 – present*

Subject: advanced nutrition and metabolism for Master and Doctoral level
Life cycle nutrition for Bachelor

Teaching hours: 3 hours per week for one semester

Teaching remit

– Lecturing;

At first I reviewed what I taught last class in the text book and I often make quizzes for undergraduate students. As for graduate school students, I make it a rule to let them make power point (ppt) regarding scientific papers. I ask them to send me the ppt file and original article by e-mail before their presentation. Then I response and review their slides about what they omitted, misreading and errors thoroughly. If they got my response, they usually correct and supplement what they mistake or omit. When they make oral presentation in the class, I can check their upgraded ppt slides and fluent skills for oral presentation. I try to teach how to criticize and analyze the scientific papers.

- Assignment;

Each student has to prepare the presentation about scientific papers related with her own research field or current issue using power point.

- Discussion;

Every student in the class must join the discussion regarding the scientific topic presented. In the course of this, they try to recognize what good points and weak points are regarding the issues. The presenter must correct that the students point out some errors or suggestions in her ppt slides then upload it in e-class online. Actually the presenter must correct the ppt slides twice; the first is before the presentation and the second is after presentation. Other students except for the presenter must study the paper that will be presented before the class.

- Scoring;

I score the students' grade under the consideration of attendance, paper exams, presentation, and the activity of discussion. However, I put a big portion to measure the score the change between the first slides and the final's.

Nature and diversity of teaching

My teaching has included that reviewing the last class, lecturing the main chapter, student's presentation and discussion. My specific aim to teach is to make my students understand what we study fully and to make them feel their upgraded view points. I always give a comment to praise their development and enthusiasm. Therefore I usually try to explain more fundamentally, more detail, and easier. In addition to this I strive to give a positive sight and to arouse their potential ability for their future.

Examination and assessment

According to the school discipline, middle term exam, final exam, presentation, and attendance used to be considered.

Production of teaching material

The final product made by presenter can be shared online and give a good suggestion to the researchers under the publisher (student who made it)'s agreement.

Course evaluations and evaluations of teaching and education.

After final exam, every student has to evaluate the class attended about teaching online.

b. Suwon Women's University of Food Science and Nutrition

Length of time

Period: *June 2004 – Feb. 2005*

Subject: Sports nutrition for Bachelor

Teaching hours: 4 hours per week for one semester

Teaching remit

– Lecturing;

At first I reviewed carbohydrate, lipid, and protein metabolism at the level of the individual cell, with emphasis on metabolic pathways common to nearly all eukaryotic cells.

Second, I lectured 1) how the major organs and tissues interact through integration of their metabolic pathways, 2) hormonal regulation of these metabolic processes in maintaining homeostasis, and 3) examples of the body's ability to maintain homeostasis under special circumstances of fasting and intensive exercise.

- Assignment;

Each student had to prepare the presentation about current issue related with sports nutrition using power point.

- Discussion;

Every student in the class discussed main topic presented and tried to find

Good points and weak points regarding commented issues.

- Scoring;

I scored the students' grade under the consideration of attendance, paper exams, presentation, and the activity of discussion.

Nature and diversity of your teaching

My teaching has included that reviewing the last class, lecturing the main chapter, student's presentation and discussion. My specific aim to teach is to make my students understand what we study. Therefore I usually try to explain more fundamentally, more detail, and easier. Every student has the chance to present his/her own study and to study scientific papers managing

current issues.

Examination and assessment

According to the school discipline, middle term exam, final exam, presentation, and attendance used to be considered.

Production of teaching material

The power points made by students could be shared and used for one another under the publisher (student who made it)'s agreement.

Course evaluations and evaluations of teaching and education

After final exam, every student has to evaluate the class attended about teaching online.

Other activities for community

*Pilgrim in WYD, Madrid 2011

- I have amde a pilgrimage to WYD(World Youth Day) whicht is a great worldwide encounter with the Pope which is celebrated every three years in a different country. This time it was celebrated in Madrid from August 16th to 21st, 2011.

**Volunteer at Vincentius house*

March 1998- August 2000

- I undertook the bathing of physically handicapped children and the cleaning of facilities once every two weeks. This voluntary service enabled me to realize that God is reflected in every human being and that every human is equal and valuable.

**Volunteer, undertaking Liturgy of the word of God in Seoul National university hospital's chapel,*

2000-present

-I explained the word of God, undertaking reading during weekly mass at the hospital's Pastor Room.

**Volunteer, International Toxicological conference 2003, Yonsei University, Seoul, Korea.*

**Volunteer, Free Radical and Biological conference 2005, Seoul National University, Seoul, Korea.*

Committee work

Member of Daegu Juvenile Recorder Symphony Orchestra

May 1987

- July 1993

Regular Concerts, Daegu Culture & Arts Center, Daegu, Korea July 1992

- I regularly participated in performances along with junior and colleague students as an old member at the orchestra I had worked for since my child days. I continued this even after entering university. I *have come* to learn how to strike up friendships with others through music and how to recognize and consider others through group activities.

Member of Club Amaclpia (club for amateur pianists).

September 2003 –September 2005

- Joint concert at the Yongsan Art Hall in 2004
Tune: Beethoven Piano Sonata Nr. 2 A-Dur op. 2, 2- IV
The club for piano non-majors enabled me to share the passion for music, and listen to other performances in order to grow into a refined musician.

*Member of the Genesis team in 'God is love' Bible study club
March 1997 –March 1998*

This Catholic youth Bible club is a community group. The aim is for young people to connect with each other through the sword of the spirit. In this club, young people read the Bible in small groups and make efforts to practice the word of God in daily life, and to practice and live life in accordance with the word.

After joining the Genesis group, I began to study the Bible together with other members, meditated and listened to the Word. Through this group's activities, I was able to answer God's question; "Where are you?" I could say with self-confidence that I am here and I am working as your tool.

*Member of Exodus team in 'God is love' Bible study club
March 1999 – Aug 2000*

- In this group we discussed the plight of Egyptians. I realized for the first time that immigrants and foreign workers are not protected in terms of human rights and medical care, and started to pray for them. This awareness allowed me to engage in a voluntary interpreting service at the Raphael Clinic, a free health center for foreign laborers which also assists in transferring patients to other hospitals.

*Servant of the Exodus team in 'God is love' Bible study club
May 2001 – March 2002*

- During the course of my master's studies, I was in charge of spreading the word of God. I was able to achieve this as a voluntary teacher of Egyptian workers. My team members consisted of three undergraduate students, all of whom became volunteers after finishing the Bible study course. Through all my academic responsibilities and commitments, I was still able to grow spiritually and live according to the word of God. This experience was enhanced by experiences with other students.

*Servant of the Exodus team in 'God is love' bible study club
August 2006 – May 2007*

- During the course of my doctoral study, I was in charge of learning the Exodus along with the group members of four clinic nurses and one office worker. At the clinic's Father office, we shared our meditations with each other and held Pascha. Though our academic and professional commitments were substantial and tiring, we gathered together in search of the word of God, gained courage from the word of God and were always filled with joy and vitality.

Member of Travel club

Traveled alone in South Africa

August 2002 - September 2002

- After obtaining a masters degree I went on an overseas journey for the purpose of seeing the greater world outside the laboratory. This trip enabled me to see the sight of untouched nature. It was also inspiring visit Robin Island and the Jail in which Nelson

Mandela was imprisoned for over 30 years. It became belatedly evident to me that wealth distribution and racial discrimination are at the core of humanitarian issues on this planet.

*Traveled alone in Kenya, Africa
June 2003*

May 2003-

- I was able to realize my dream of going on a journey after reading *Born Free*. Living with the Massai indigenous people in a village, I learned a great lesson about humility. My experiences there allowed me to realize that humans are noble beings that should respect each other.

Traveled alone in Bangkok, Cambodia, and Vietnam

February 2005 - March 2005

- Going through these Asian countries, I realized that health is not always in proportion to wealth. Having difficulties in verbal communication, I experienced that human gestures can be effective expression and communication tools.

*Traveled alone in Germany
October 2006*

- Visiting the World Congress on Controversies in Obesity, Diabetes and Hypertension (CODHy) in Germany, I also visited Munich, Bamberg, Nuremberg, Würzburg, Neuschwanstein, Cologne and Berlin. I had opportunities of observing art, religion and history at many museums, cathedrals and galleries.

Traveled with Korean martyrology team of the Gusan holy place to Italy, Germany, Poland, and Czech Republic.

January 2007

- I went on a field trip with the Korean church history team of the Gusan Martyr's shrine. Gusan Martyr's Shrine is the hometown of St. Anthony Kim Song-u (1795–1841), who was also died a martyr in Gusan and buried there. The village is one of the most well-preserved religious communities in Korea. During this pilgrimage, I worked as an interpreter and church relics guide. I was happy in sharing the knowledge and know how I had accumulated during this trip. We shared saints' vestiges, human prosperity, glory and agony with each other, travelling from the Vatican via the Assisi Monastery, Auschwitz, Berlin and Warsaw to Praha. Such experiences and knowledge laid the groundwork for construction of the memorial for Korean martyrs at the Gusan Martyr's Shrine.

Member of swimming club in YMCA sports center, Young-in

June 2007 -

present

Accompanied by mass

March 2009 - present

- I am playing the cello for the Mass in Gusan Martyr's Shrine and dominican monastery in Seoul.

Gusan Martyr's Shrine is the hometown of St. Anthony Kim Song-u (1795–1841), who was also died a martyr in Gusan and buried there. The village is one of the most well-preserved religious communities in Korea.

Ko. seonghee