# Dokyoung Yoon, MD, PhD, MBA

#### **Professional Profile**

Dr. Dokyoung Yoon is Co-Founder and Chief Scientist of Washington Scientific LLC. Dr. Yoon specializes in application of scientific principles and evidence-based risk management strategies to medical, environmental health, and pharmaceutical issues. He has more than 20 years experience as a physician and medical researcher. He has conducted more than 40 clinical studies in the fields of chronic diseases and infectious diseases including diabetes, obesity, hypertension, geriatrics, mental health, and hepatitis. He also led the studies in emergency preparedness and disaster response, and health economics. He has worked as a reviewer for the American Journal of Public Health, the Clinical Therapeutics, and the Korean Journal of Family Medicine.

During his tenure as an Associate Professor, Korea University College of Medicine, and Director, Department of Family Medicine, Dr. Yoon established the Department of Family Medicine, the Health Promotion Center, the Travel Medicine Clinic in Ansan Hospital, Korea University Medical Center. He also played a pivotal role in establishing Clinical Trial Centers at Korea University Medical Center. He participated and led humanitarian relief actions in Sri Lanka and Indonesia during the tsunami disaster in 2005 and the earthquake disaster in 2006.

Dr. Yoon served as a committee member, Medical Knowledge Improvement Committee under the Korean Medical Association, to provide evidence-based information to the medical community and general public. He wrote chapters of the medical textbooks published by the Korean Academy of Family Medicine. He was featured more than 30 times in Korean nationwide television programs, and more than 30 newspaper/magazine articles, guiding general public by correcting misconception and providing evidence based medical knowledge.

Dr. Yoon received an M.P.H. degree from Johns Hopkins School of Public Health and was certified in public health (C.P.H.). He also holds an M.B.A. degree from Carey Business School, John Hopkins University. Dr. Yoon received his M.D. and Ph.D. degrees from Korea University Medical College in Seoul, Korea and received a certificate from ECFMG, Educational Commission for Foreign Medical Graduate, U.S.A. He completed residency training in 1995 in Family Medicine at Korea University Medical Center (KUMC), Korea.

### **Academic Credentials and Professional Honors**

M.P.H., Bloomberg School of Public Health, Johns Hopkins University, USA, 2008 M.B.A., Carey Business School, Johns Hopkins University, USA, 2008 Ph.D., Medical Science, College of Medicine, Korea University, Korea, 1999 M.D., College of Medicine, Korea University, Korea, 1991

Aoyama Kita Scholar, Johns Hopkins Bloomberg School of Public Health, USA, 2007

Outstanding Research Award, MSD/Korean Academy of Family Medicine, Korea, 2005 Appreciation, Geriatric Education and Training Center, Harvard Medical School, USA, 2005 Honorary Award, Korea University Medical Center, Seoul, Korea, 2005 UN Medal, MINURSO, UN PKO, Western Sahara, 1997

#### **Licenses and Certifications**

Certified in Public Health, National Board of Public Health Examiners, USA, 2008 Educational Commission for Foreign Medical Graduates (ECFMG) Certification, ECFMG, USA, 1998

Board Certification in Family Medicine, Ministry of Health and Welfare, Korea, 1995 Medical Doctor, Ministry of Health and Welfare, Korea, 1991

### Languages

Korean, English

#### **Publications**

Yoon D, Frick KD, Carr DA, Austin JK. Economic impact of epilepsy in the United States. Epilepsia 2009; Oct; 50(10):2186–2191.

Kim JA, Kim SM, Yoon D. The relationship between gamma-glutamyltransferase and adiponectin in nonalcoholic women. Metabolism 2007; 56(4):578–582.

Kim YK, Paik JW, Lee SW, Yoon D, Han C, Lee BH. Increased plasma nitric oxide level associated with suicide attempt in depressive patients. Progress in Neuropsychopharmacology & Biological Psychiatry 2006; 30(6):1091–1086.

Lee BH, Lee SW, Yoon D, Lee HJ, Yang JC, Shim SH, Kim DH, Ryu SH, Han C, Kim YK. Increased plasma nitric oxide metabolites in suicide attempters. Neuropsychobiology 2006; 53(3):127–132.

Kim SM, Lee JS, Lee J, Na JK, Han JH, Yoon DK, Baik SH, Choi DS, Choi KM. Prevalence of diabetes and impaired fasting glucose in Korea: Korean national health and nutrition survey. Diabetes Care 2006; 29(2):226–231.

Lim JH, Yoon D, Jung G, Kim W, Lee HC. Medical needs of tsunami disaster refugee camps. Family Medicine 2005; 37(6):422–428.

Yoon D, Lee SH, Park HS, Lee JH, Park JS, Cho KH, Kim SM. Hypoadiponectinemia and insulin resistance are associated with nonalcoholic fatty liver disease. Journal of Korean Medical Science 2005; 20(3):421–426.

Ko BJ, Choi YS, Kim SH, Kim JA, Hong JI, Yoon DK, Kim JH, Sohn KH. Deep vein thrombosis in advanced cervical cancer patient after taking Cyclooxigenase-2 selective inhibitors. Korean Journal of Hospice Palliative Care 2005; 8(1):57–64. (In Korean).

Kim SM, Yoon DK, Yang BS, Choi KS. An activation of peroxisome proliferator-activated recepter  $\delta$  attenuate alcoholic liver disease and nonalcoholic fatty liver disease in rats. Journal of Korean Society for the Study of Obesity 2005; 14(1):29–38. (In Korean).

Kang JH, Lee YY, Yu BY, Yang BS, Cho KH, Yoon DK, Roh YK. Adiponectin induced growth arrest and apoptosis of MDA-MB-231 breast cancer cell. Archives of Pharmacal Research 2005; 28(11):1263–1269.

Kim JA, Park YG, Cho KH, Hong MH, Han HC, Choi YS, Yoon D. Heart rate variability and obesity indices: Emphasis on the response to noise and standing. Journal of the American Board of Family Medicine 2005; 18(2):97–103.

Kim YK, Lee HJ, Kim JY, Yoon DK, Cho SH, Lee MS. Low serum cholesterol is correlated to suicidality in a Korean sample. Acta Psychiatrica Scandinavica 2002; 105:141–148.

Yoon D, Kwon JH, Lee YM, Choil YS, Hong MH. How popular are folk remedies with Korean diabetic patients? Asia Pacific Family Medicine 2002; 1(1):18–22.

## **Published Conference Proceedings/Abstracts**

Yoon D, Frick KD, Carr DA, Austin JK. Economic impact of epilepsy in the United States. The American Academy of Neurology 60th Annual Meeting, Chicago, IL, April 15, 2008.

Yoon D, Kuehnle JK, Huynh L, Yi EH. Nursing shortage, strategy, and future implication. The 135th Annual Meeting & Exposition American Public Health Association, Washington, D.C., 2007.

Yoon D, Lim JH, Kim WJ, Jung G, Lee HS. Diarrhorea patients were minimal during tsunami disasters. Abstract P-38, Northern European Conference on Travel Medicine, Edinburgh, Scotland, UK, 2006.

Yoon D, Cho KH, Le CH, Kim SM, Choi YS. Vertical infection proportions in Hepatitis B virus infected children and adolescent. WONCA Asia Pacific Regional Conference, Tokyo, Japan, 2005.

Yoon D, Lim JH, Kim WJ, Jung G, Lee HS. Medical needs of tsunami disaster refugee camps. WONCA Asia Pacific Regional Conference, Tokyo, Japan, 2005.

Yoon D. Screening Test of osteoporosis and osteopenia in Korean post-menopausal women. 17th WONCA World Conference, Orlando, FL, 2004.

Yoon D. Correlation between chronic stress and salivary cortisol level. 17th WONCA World Conference, Orlando, FL, 2004.

Yoon D. Correlation of the CHD risk factors and health rate variability. 17th WONCA World Conference, Orlando, FL, 2004.

### **Textbooks**

Coauthor. Textbook of Family Medicine. Published by Korean Academy of Family Medicine, ISBN 978-89-878-70-3, 2007. (In Korean).

Cotranslator. Swartz Textbook of Physical Diagnosis: History and Examination. Translated by 27 Medical School Professors, English version edited by Swartz MH, Saunders WB, an imprint of Elsevier, Korean version ISBN 9812591079, 2004. (In Korean).

Coauthor. Life Time Health Promotion. Published by Korean Academy of Family Medicine, ISBN 89-5629-032-6, 2003. (In Korean).

Coauthor. Changing Way of Thinking for Health. ISBN 89-85348-50-7, 2003. (In Korean).

Coauthor. Geriatrics. Korean Publication Registration Number 10-1640, 2001. (In Korean).

#### **Invited Presentations**

Yoon D. Imported infectious disease situation. Annual Conference of Korean Academy of Family Medicine, Seoul, Korea, 2005. J Korean Academy Family Med 2005; 26(4):S9–12.

Yoon D. Importance of family physician role in fighting against disasters. WONCA Asia Pacific Regional Conference, Kyoto, Japan, 2005.

Yoon D. Geriatrics travel medicine. Annual Conference of The Korean Geriatrics Society, Daegu, Korea, 2005. J Korean Geriatric Society 2005; 9(S1):S147–155.

Yoon D. Treatment of chronic hepatitis. Annual Conference of Korean Academy of Family Medicine, Pusan, Korea, 2004. J Korean Academy of Family Medicine 2004; 25(4):S315320.

Yoon D. Malaria. Annual Conference of Korean Academy of Family Medicine, Seoul, Korea, 2003. J Korean Academy Family Medicine 2003; 24(10):S41–49.

Yoon D. Cough-core review. Annual Conference of Korean Academy of Family Medicine, Seoul, Korea, 2002. J Korean Academy of Family Medicine 2002; 23(4):S140–143.

## **Prior Experience**

Assistant/Associate Professor, College of Medicine, Korea University, Korea, 2003–2009
Department Director/Physician, Department of Family Medicine, Ansan Hospital, Korea University Medical Center, Korea, 1998–2009
Research Consultant, Johns Hopkins Medical Institution, 2007–2008
Professor Extraordinary, Korea Digital University, Korea, 2002–2006
Clinical Instructor/Clinical Assistant Professor, Department of Family Medicine, Korea University Medical Center, Korea, 1998–2003
Military Doctor, Korean Army, Korea, 1995–1998
Medical Officer, MINURSO, UN, Western Sahara, 1997–1997

Resident Physician, Korea University Medical Center, 1991–1995

## **Project Experience**

Dr. Yoon provides critical scientific analyses and risk management strategies to multinational clients. Dr. Yoon's work includes developing strategies to estimate the prevalence of a rare disease using health insurance claim data; evaluation of epidemiologic studies involving cancer or other chronic diseases; evaluation of specificity and alternative causes of medical conditions; review of National Implementation Plan for Stockholm Convention on Persistent Organic Pollutants; examination of plausibility in applying animal study results to human health; analyzing environmental exposure modeling; evaluation of admissibility of scientific evidences in courts based on human, animal and *in vitro* evidence; examination of sound application of causation criteria; and examination of disease susceptibility claims.

Dr. Yoon developed strategies for patient recruiting with emphasis on recruiting problematic patients for interview, developed questionnaires, participated in patient education programs focused on community-based participatory research (CBPR) on diabetes and hypertension at John Hopkins Medical Institution; analyzed data and wrote manuscript on health related quality and economic impact research funded by the Epilepsy Foundation; wrote patient friendly drug information for epilepsy patients and caregivers; provided the health economics expertise on breast cancer and colorectal cancer for a global medical/pharmaceutical consulting firm.

Dr. Yoon contributed in developing Standard Operation Protocols (SOPs) for Institutional Review Boards (IRBs) and Clinical Trial Centers (CTCs) in Korea University Medical Center. Dr. Yoon worked as an Information Technology Committee member while implementing an electronic medical record (EMR) system to the hospitals in the Korea University Medical Center (KUMC). The CTCs which Dr. Yoon played a central role in establishment were the first of their kind in Korea.

While establishing a Health Promotion Center, Dr. Yoon and his team designed evidence-based screening strategies for infectious diseases, chronic diseases and cancers including hepatitis A/B/C, sexually transmitted diseases (STDs), cardiovascular diseases (CVDs), diabetes, metabolic syndrome, stomach cancer, and lung cancer. Dr. Yoon wrote patient-centered and family-oriented medical information booklets for use in the Health Promotion Center. During establishing a Travel Medicine Clinic, Dr. Yoon devised patient-centered prevention strategies

for accidents and infectious diseases including malaria, STDs, and traveler's diarrhea. The Travel Medicine Clinic that Dr. Yoon established was the first of its kind in Korea.

Dr. Yoon served as a committee member, Medical Knowledge Improvement Committee under the Korean Medical Association (KMA), to provide evidence-based information to the medical community and general public.

Dr. Yoon participated and led numerous humanitarian relief actions including Sri Lanka and Indonesia tsunami disaster in 2005 and the earthquake disaster in 2006. Based on his experience during the disaster responses, Dr. Yoon reported that patient presenting patterns during a natural disaster are different from expectations from medical communities. This result was published in Family Medicine, a respected journal published by the Society of Teachers of Family Medicine.

### **Professional Affiliations**

- American Public Health Association—APHA (member)
- Global Family Doctor—WONCA (member)
- American Association of Family Physician—AAFP (member)
- International Society of Pharmacoeconomics and Outcomes Research—ISPOR (member)
- Global Health Council (member)
- Korean Academy of Family Medicine
  - Executive Committee, December 2003-December 2005
- General Affairs, Korean Academy of Travel Medicine
  - -Director, November 2003-June 2006
- Board Certification Examination Committee, Korean Academy of Family Medicine
  - Committee member, December 2001-June 2006