

Curriculum Vitae / Byung-Hyun Park, M.D., Ph.D.

Byung-Hyun Park, M.D., Ph.D.

Clinical Research Professor / Jeonbuk National University Hospital
Department of Biochemistry and Molecular Biology / Center for Metaflammation Research

AFFILIATIONS

Clinical Research Professor / Jeonbuk National University Hospital
Department of Biochemistry and Molecular Biology / Center for Metaflammation Research
Korean Medical Association
Korean Society for Biochemistry and Molecular Biology
American Diabetes Association
European Association for the Study of Diabetes

EDUCATION

1985 – 1991
Jeonbuk National University Medical School & obtained MD
1991 – 1993
Graduate School, Jeonbuk National University & obtained a Master of Medical Science for thesis entitled “Role of calcium in alloxan-induced pancreatic β -cell damage”
1993 – 1995
Graduate School, Jeonbuk National University & obtained a PhD degree for thesis entitled “Protective mechanism of glucose against alloxan-induced pancreatic β -cell damage”

PROFESSIONAL EXPERIENCE

Professor, 2011 – present
Jeonbuk National University Medical School

Curriculum Vitae / Byung-Hyun Park, M.D., Ph.D.

Director, 2015 – present

Research Institute for Endocrine Sciences, Jeonbuk National University

Director, 2017 – present

Center for Metaflammation Research, National Research Foundation

Director, 2016 – 2018

Jeonbuk National University Medical Library

Review Board, 2013 – 2016

National Research Foundation

Visiting Associate Professor, 2011 – 2011

UT Southwestern Medical Center at Dallas

Director, 2008 – 2017

Diabetes Research Center, National Research Foundation

Associate Professor, 2006 – 2011

Jeonbuk National University Medical School

Research Fellow (Supervisor: Prof. Roger H. Unger), 2002 – 2005

Internal Medicine, UT Southwestern Medical Center at Dallas

Assistant Professor, 2001 – 2006

Jeonbuk National University Medical School

Full-time Instructor, 1999 – 2001

Jeonbuk National University Medical School

Mandatory Military Duty, Captain, 1996 – 1999

Aeromedical Research Center, Air Force

Research and Teaching Assistant (Supervisor: Prof. Hyung-Rho Kim), 1991 – 1996

Jeonbuk National University Medical School

CLINICAL TRIALS

- 1) A randomized, double-blind, placebo-controlled crossover clinical trial to evaluate the anti-diabetic effects of *Lactobacillus plantarum* HAC01 in the subjects with prediabetes (2019.07-2020.11).

- 2) A randomized, double-blind, placebo-controlled crossover clinical trial to evaluate the anti-diabetic effects of *Ishige okamurae* extract in the subjects with prediabetes (2019.10-present).
- 3) A randomized, double-blind, placebo-controlled crossover clinical trial to assesses the effect of UG0712 on exercise performance in healthy subjects (2020.12-present).

PATENTS

- 1) Antidiabetic componets of *Amomum xanthoides* extracts. (0354912), Korea
- 2) Anti-melanogenetic composition and whitening composition with xanthohumol as effective ingredient. (10-0873714), Korea
- 3) Antidiabetic components of *Radix asari* extracts. (10-0912020), Korea
- 4) Composition comprising *Nartostachys jatamansi* extract for preventing and treating insulin dependent diabetes mellitus, food comprising thereof. (10-2010-0018147), Korea
- 5) Antiobesity components of *Rhizoma Dioscoreae Tokoronis* extract using water. (10-0962435), Korea
- 6) Pharmaceutical composition comprising *Fructus xanthii* extract. (10-1020233), Korea
- 7) Whitening composition containing saponification product of sunflower oil as an effective ingredient. (10-2009-0087850, 2009/09/17, 10-1141168), Korea
- 8) Composition comprising isolated sulfuretin from *Rhus verniciflura* for preventing and treating insulin dependent diabetes mellitus, food comprising thereof. (10-2010-0038667, 2010/04/26, 10-1159442), Korea
- 9) Antidiabetic composition comprising dihydroavenanthramide D. (10-2009-0053847, 2009/06/17, 10-1166219), Korea
- 10) Composition for skin-whitener containing saponified evening primrose seed oil as an effective ingredient. (10-2009-0099750, PCT/KR2010/000501, 2009/10/20 or 2010/01/28 for PCT, 10-1179308)
- 11) Composition for preventing and treating asthma, and health food comprising thereof. (10-2010-0091362, 2010/09/17, 10-1263555), Korea
- 12) Fermentation increases antidiabetic effects of *Acanthopanax Senticosus*. (10-2008-0091733, 2008/09/18, 10-1390160), Korea
- 13) Pharmaceuical composition for the prevention and treatment of type 1 diabetes comprising Polyphenols extracted from *Broussonetia kazinoki* as an active ingredient. (10-2014-0163589, 2014/11/21, 10-

1620022), Korea

- 14) Pharmaceutical composition for descending blood glucose level containing persimmon leaf extract. (10-2015-01111035), Korea
- 15) Composition for preventing of hyperglycemia by statin (10-2020-0080065), Korea.

PUBLICATIONS

- 1) Cho Effects of omega-3 fatty acid-rich *Zanthoxylum schinifolium* seed oil in patients with dry eye: A pilot randomized, double-blind, placebo-controlled trial.
- 2) A randomized, double-blind, placebo-controlled crossover clinical trial to evaluate the anti-diabetic effects of *Allium hookeri* extract in the subjects with prediabetes. *BMC Complement. Med. Ther.* 20:211 (2020) (ISSN: 2662-7671, IF: 2.833).
- 3) Effects of a lifestyle-modification program on blood-glucose regulation and health promotion in diabetic patients: A randomized controlled trial. *J Lifestyle Med.* 10: 77-91 (2020) (ISSN: 2234-8549).
- 4) Effect of toxic trace element detoxification, body fat reduction following four-week intake of the Wellnessup diet: a three-arm, randomized clinical trial. *Nutrition Metabol* 17: 47 (2020) (ISSN: 1743-7075, IF: 3.211).
- 5) Serum follicle-stimulating hormone levels are associated with cardiometabolic risk factors in postmenopausal Korean women. *J. Clin. Med.* 9:1161 (2020) (ISSN: 2077-0383, IF: 3.303).
- 6) The associations between liver enzymes and cardiovascular risk factors in adults with mild dyslipidemia. *J. Clin. Med.* 9:1147 (2020) (ISSN: 2077-0383, IF: 3.303).
- 7) Clinical characteristics and associated risk factors of prediabetes in the southwestern region of Korea from 2010–2019. *J. Clin. Med.* 9:1114 (2020) (ISSN: 2077-0383, IF: 3.303).
- 8) The effects of steamed ginger ethanolic extract on weight and body fat loss: A randomized, double-blind, placebo-controlled clinical trial. *Food Sci. Biotechnol.* 29(2): 265-273 (2020) (ISSN: 1226-7708, IF: 1.513).
- 9) A randomized, double-blind, placebo-controlled clinical trial assessing the effects of *Angelica gigas* Nakai extract on blood triglycerides. *Nutrients* 12:377 (2020) (ISSN: 2072-6643, IF: 4.546).
- 10) Sirtuin 6 in preosteoclasts suppresses age-and estrogen deficiency-related bone loss through estrogen receptor α stabilization. *Cell Death Differ.* 26(11):2358-2370 (2019) (ISSN: 1350-9047, IF: 10.717).

Curriculum Vitae / Byung-Hyun Park, M.D., Ph.D.

- 11) Gypenoside UL4-rich *Gynostemma pentaphyllum* extract exerts a hepatoprotective effect on diet-induced nonalcoholic fatty liver disease. *Am. J. Chinese Med.* 46(6):1315-1332 (2018) (ISSN: 0192-415X, IF: 3.682).
- 12) Mulberry leaf extract displays antidiabetic activity in db/db mice via Akt and AMP-activated protein kinase phosphorylation. *Food & Nutrition Res.* 62:1473 (2018) (ISSN: 1654-6628, IF: 3.647).
- 13) Osterix regulates corticalization via integrin $\beta 3$ expression for longitudinal bone growth. *Exp. Mol. Med.* 50:80 (2018) (ISSN: 1226-3613, IF: 5.418).
- 14) Epigallocatechin-3-gallate-rich green tea extract ameliorates fatty liver and weight gain in mice fed a high fat diet by activating the sirtuin 1 and AMP activating protein kinase pathway. *Am. J. Chinese Med.* 46(3):617-632 (2018) (ISSN: 0192-415X, IF: 3.682).
- 15) Decursin and decursinol angelate-rich *Angelica gigas* Nakai extract suppresses de novo lipogenesis and alleviates nonalcoholic fatty liver disease and dyslipidemia in mice fed a high fat diet. *J. Funct. Foods* 31:208-216 (2017) (ISSN: 1756-4646, IF: 3.701).
- 16) Supplementation with *Lycium chinense* fruit extract attenuates methionine choline deficient diet-induced steatohepatitis in mice. *J. Funct. Foods* 31:1-8 (2017) (ISSN: 1756-4646, IF: 3.701).
- 17) *Angelica gigas* ameliorates hyperglycemia and hepatic steatosis in C57BL/KsJ-db/db mice via activation of AMP-activated protein kinase signaling pathway. *Am. J. Chinese Med.* 44(8): 1627-1638 (2016) (ISSN: 0192-415X, IF: 3.682).
- 18) Randomized, double-blind, placebo-controlled trial of *Ficus carica* paste for the management of functional constipation. *Asia Pac. J. Clin. Nutr.* 25(3): 487-496 (2016) (ISSN: 0964-7058, IF: 1.236).
- 19) Mixed grain containing giant embryonic brown rice improves postprandial glycemic response in healthy subjects. *Nutr. Diet.* 73(2): 132-138 (2016) (ISSN: 1446-6368, IF: 1.742).
- 20) The protein kinase 2 inhibitor tetrabromobenzotriazole protects against renal ischemia reperfusion injury. *Sci. Rep.* 5:14816 (2015) (ISSN: 2045-2322, IF: 3.998).
- 21) Polyunsaturated fatty acids protect against pancreatic β -cell damage due to ER stress and prevent diabetes development. *Mol. Nutr. Food Res.* 59(9): 1791-1802 (2015) (ISSN: 1613-4125, IF: 5.309).
- 22) Effectiveness of *Hizikia fusiformis* extract on erosive gastritis: A 4-week, randomized, double-blind and placebo-controlled trial. *Int. J. Pharmacol.* 11(7): 719-725 (2015) (ISSN: 1811-7775, IF: 0.692).
- 23) Hypoglycemic effects of persimmon leaf water extract in diabetes animal models. *Mol. Med. Rep.* 12(2) 2547-2554 (2015) (ISSN: 1791-2997, IF: 2.100).

Curriculum Vitae / Byung-Hyun Park, M.D., Ph.D.

- 24) Aggravation of post-ischemic liver injury by overexpression of insulin-like growth factor binding protein 3. *Sci. Rep.* 5:11231 (2015) (ISSN: 2045-2322, IF: 3.998).
- 25) Supplementation with *Aspergillus oryzae*-fermented kochujang lowers serum cholesterol in subjects with hyperlipidemia. *Clin. Nutr.* 34(3): 383-387 (2015) (ISSN: 0261-5614, IF: 6.360).
- 26) Emodin isolated from *Rheum palmatum* prevents cytokine-induced β -cell damage and the development of type 1 diabetes. *J. Funct. Foods* 16:9-19 (2015) (ISSN: 1756-4646, IF: 3.701).
- 27) Polyphenols isolated from *Broussonetia kazinoki* prevent cytokine-induced β -cell damage and the development of type 1 diabetes. *Exp. Mol. Med.* 47: e160 (2015) (ISSN: 1226-3613, IF: 5.418).
- 28) A 8-wk, randomized, double-blind, placebo-controlled clinical trial for the antidiabetic effects of hydrolyzed ginseng extract. *J. Ginseng Res.* 38(4): 239-243 (2014) (ISSN: 1226-8453, IF: 5.487).
- 29) Reduction of blood lipid parameters by a 12-wk supplementation of aged black garlic: a randomized controlled trial. *Nutrition* 30(9): 1034-1039 (2014) (ISSN: 0899-9007, IF: 3.591).
- 30) Postprandial glucose-lowering effects of fermented red ginseng in subjects with impaired fasting glucose or type 2 diabetes: A randomized, double-blind, placebo-controlled clinical trial. *BMC Complem. Altern. Med.* 14:237 (2014) (ISSN: 1472-6882, IF: 2.479).
- 31) Aqueous extracts of purple sweet potato attenuate weight gain in high fat-fed mice. *Int. J. Pharmacol.* 9(1): 42-49 (2013) (ISSN: 1811-7775, IF: 0.754).
- 32) Elevated levels of serum endogenous secretory RAGE are associated with decreased glomerular filtration rate in healthy adults. *Int. Med. J.* 20(1): 20-24 (2013) (ISSN: 1341-2051, IF: 0.087).
- 33) In vivo inhibition of bone morphogenetic protein-2 on breast cancer cell growth. *Spine* 38(3): E143-E150 (2013) (ISSN: 0362-2436, IF: 2.792).