

Seokyung An, PhD

Biotatistician | Epidemiologist

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🔗 <https://seokyungan.github.io/>

Profile

Experienced biostatistician and epidemiologist with a demonstrated history of working in academic research, the National Cancer Center, and currently serving as a Senior Statistical Analyst at Northwestern University. Skilled in biostatistics, data visualization, and clinical research. Strong research professional with a Doctor in Medical Science (PhD) from Seoul National University, specializing in the prediction and prevention of cardiometabolic disease.

Education

03/2016 – 08/2022
Seoul, South Korea
Doctor of Philosophy, Medical Science
Seoul National University Graduate School, Department of Biomedical Sciences

03/2012 – 02/2016
Seoul, South Korea
Bachelor of Statistics
Sungshin Women's University, Department of Statistics

Skills

Statistical analysis
R, SAS, SPSS, PLINK, Python

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Artificial intelligence modeling
Machine learning and Deep learning

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Data management
SQL, RedCap

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Collaboration
Task management and communication

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Professional Experience

07/2023 – present
Chicago, US
Senior Statistical Analyst
Northwestern University - The Feinberg School of Medicine
Senior Statistician, Bluhm Cardiovascular Institute

10/2022 – 06/2023
Ilsan, South Korea
Postdoctoral fellow
National Cancer Center
Investigated the relationships between environmental and genomic factors in cancer and developed cancer prediction models using artificial intelligence.

03/2016 – 08/2022
Seoul, South Korea
Graduate student, full time
Seoul National University Graduate School
Mastered advanced biostatistics and epidemiology and developed metabolic disease prediction models using artificial intelligence methods.

06/2015 – 08/2015 Ilsan, Seoul Korea	Intern <i>National Cancer Center</i> Investigated the association between colorectal cancer and dietary intake.
06/2014 – 08/2014 Seoul, South Korea	Intern <i>Seoul National University Cancer Research Institute</i> Investigated hereditary breast cancer and analyzed cohort data from the Korean Hereditary Breast Cancer Study (KOHBRA).

Publications (indicates* first)

09/2023	Comparison of intravascular ultrasound, optical coherence tomography, and conventional angiography-guided percutaneous coronary interventions: A systematic review, network meta-analysis, and meta-regression  <i>Catheter Cardiovasc Interv</i> Park DY*, An S , Jolly N, Attanasio S, Yadav N, Gutierrez JA, Nanna MG, Rao SV, Vij A.
04/2023	Trends and impact of intravascular ultrasound and optical coherence tomography on percutaneous coronary intervention for myocardial infarction  <i>IJC Heart & Vasculature</i> Park DY*, Vemmou E, An S , Nikolakopoulos Ilias, Regan CJ, Cambi BC, Frampton J, Vij A, Brilakis E, Nanna MG
02/2023	Factor Xa Inhibitors Versus Vitamin K Antagonist in Morbidly Obese Patients With Venous Thromboembolism: A Systematic Review and Meta-Analysis  <i>BMC Cardiovasc Disord</i> . PMID: 36814196 Park DY*, An S* , Arif AW, Sana MK, Vij A
02/2023	Trends and impact of intravascular ultrasound and optical coherence tomography on percutaneous coronary intervention for myocardial infarction  <i>Int J Cardiol Heart Vasc</i> . 2023. PMID: 36852085 Park DY*, Vemmou E*, An S , Nikolakopoulos I, Regan CJ, Cambi BC, Frampton J, Vij A, Brilakis E, Nanna MG
01/2023	Network Meta-Analysis Comparing Angiotensin Receptor-Neprilysin Inhibitors, Angiotensin Receptor Blockers, and Angiotensin-Converting Enzyme Inhibitors in Heart Failure With Reduced Ejection Fraction  <i>Am J Cardiol</i> . 2023. PMID: 36459752 Park DY*, An S , Attanasio S, Jolly N, Malhotra S, Doukky R, Samsky MD, Sen S, Ahmad T, Nanna MG, Vij A
11/2022	Indoor tanning and the risk of overall and early-onset melanoma and non-melanoma skin cancer: Systematic review and meta-analysis.  <i>Cancers (Basel)</i> . PMID: 34885049 An S* , Kim K, Moon S, Ko KP, Kim I, Lee JE, Park SK.
11/2022	Abbreviated versus Standard Duration of DAPT after PCI: A Systematic Review and Network Meta-analysis. Am J Cardiovasc Drugs  <i>Am J Cardiovasc Drugs</i> . PMID: 35781867 Park DY*, An S* , Kumar A, Malhotra S, Jolly N, Kaur A, Kattoor A, Doukky R, Kalra A, Vij A

- 11/2022 **Projection of Cancer Incidence and Mortality From 2020 to 2035 in the Korean Population Aged 20 Years and Older** [✉](#)
J Prev Med Public Health. PMID: 36475318
 Hong Y*, Lee S, Moon S, Sung S, Lim W, Kim K, **An S**, Choi J, Ko KP, Kim I, Lee JE, Park SK
- 11/2022 **Impact of pulmonary embolism on perioperative outcomes of coronary artery bypass graft** [✉](#)
Coron Artery Dis. PMID: 35500089
 Park DY*, **An S***, Attanasio S, Doukky R, Sawaqed R, Vij A
- 11/2022 **In-hospital prognosis of malignancy-related pulmonary embolism: an analysis of the national inpatient sample 2016-2018** [✉](#)
J Thromb Thrombolysis. PMID: 35876942
 Park DY*, **An S***, Kashoor I, Ezegwu O, Gupta S
- 11/2022 **Impact of cardiac and noncardiac cirrhosis on coronary revascularization outcomes from the National Inpatient Sample, 2016 to 2018** [✉](#)
Proc (Bayl Univ Med Cent)
 Park DY*, **An S***, Warraich MS, Aldeen ZS, Maghari I, Khanal S, Arif AW, Almoghrabi A
- 10/2022 **Modified reverse shock index predicts early outcomes of heart failure with reduced ejection fraction** [✉](#)
ESC Heart Fail. PMID: 35775109
 Oh GC*, **An S***, Lee HY, Cho HJ, Jeon ES, Lee SE, Kim JJ, Kang SM, Hwang KK, Cho MC, Chae SC, Choi DJ, Yoo BS, Kim KH, Park SK, Baek SH
- 10/2022 **Association of metabolic comorbidity with myocardial infarction in individuals with a family history of cardiovascular disease: a prospective cohort study** [✉](#)
BMC Public Health. 2022. PMID: 36316766
An S*, Moon S, Park SK
- 10/2022 **Readmission rates and risk factors for readmission after transcatheter aortic valve replacement in patients with end-stage renal disease** [✉](#)
PLoS One. 2022. PMID: 36264931
 Park DY*, **An S***, Hanna JM, Wang SY, Cruz-Solbes AS, Kochar A, Lowenstern AM, Forrest JK, Ahmad Y, Cleman M, Damluji AA, Nanna MG
- 10/2022 **Incidence and risk factors of atrial fibrillation and atrial arrhythmias in people living with HIV: a systematic review and meta-analysis** [✉](#)
J Interv Card Electrophysiol. PMID: 35610524
 Park DY*, **An S***, Romero ME, Kaur A, Ravi V, Huang HD, Vij A
- 09/2022 **Shortening the duration of dual antiplatelet therapy after percutaneous coronary intervention for acute coronary syndrome: A systematic review and meta-analysis** [✉](#)
Am Heart J. PMID: 35654162
 Park DY*, Wang P*, **An S**, Grimshaw AA, Frampton J, Ohman EM, Rao SV, Nanna MG
- 07/2022 **Impact of end-stage renal disease on in-hospital outcomes of hypertensive emergency from the National Inpatient Sample, 2016 to 2018**
Proc (Bayl Univ Med Cent)
 Park DY*, **An S***, Rodriguez MA, Odeh R, Hammo H, Haque M, Arif AW

- 07/2022 **Myocarditis after COVID-19 mRNA vaccination: A systematic review of case reports and case series** 
Clin Cardiol. PMID: 35652390
 Park DY*, **An S***, Kaur A, Malhotra S, Vij A
- 06/2022 **Systematic Review and Network Meta-Analysis Comparing Bifurcation Techniques for Percutaneous Coronary Intervention** 
Journal of the American Heart Association. PMID: 35723005
 Park DY*, **An S***, Jolly N, Attanasio S, Yadav N, Rao S, Vij A
- 06/2022 **Binary cutpoint and the combined effect of systolic and diastolic pressure on cardiovascular disease mortality: A community-based cohort study** 
PLoS One. PMID: 35771898
 Lee JY*, Hong JH, Lee S, **An S**, Shin A, Park SK
- 05/2022 **Comparison of the Prevalence of Cardiometabolic Disorders and Comorbidities in Korea and United States: Analysis of the National Health and Nutrition Examination Survey** 
J Korean Med Sci. PMID: 35535376
An S*, Ahn C, Jang J, Lee J, Kang D, Lee JK, Park SK
- 03/2022 **Individualized Biological Age as a Predictor of Disease: Korean Genome and Epidemiology Study (KoGES) Cohort** 
J Pers Med. PMID: 35330504
An S*, Ahn C, Moon S, Sim EJ, Park SK
- 03/2022 **Effect of weight loss on recurrence of atrial fibrillation after ablative therapy: a systematic review and meta-analysis** 
J Interv Card Electrophysiol. PMID: 35258752
 Park DY*, **An S**, Murthi M, Kattoor AJ, Kaur A, Ravi V, Huang HD, Vij A
- 11/2021 **Obesity measures at baseline, their trajectories over time, and the incidence of chronic kidney disease: A 14 year cohort study among Korean adults** 
Nutr Metab Cardiovasc Dis. PMID: 33546946
 Zhang HS*, **An S**, Ahn C, Park SK, Park B
- 11/2020 **Isoflavone intake on the risk of overall breast cancer and molecular subtypes in women at high risk for hereditary breast cancer** 
Breast Cancer Res Treat. PMID: 33068197
 Sim EJ*, Ko KP, Ahn C, Park SM, Surh YJ, **An S**, Kim SW, Lee MH, Lee JW, Lee JE, Kim KS, Yom CK, Kim HA, Park SK
- 08/2019 **Long-term Breastfeeding in the Prevention of Allergic Rhinitis: Allergic Rhinitis Cohort Study for Kids (ARCO-Kids Study)** 
Clin Exp Otorhinolaryngol. PMID: 30992421
 Han DH*, Shin JM, **An S**, Kim JS, Kim DY, Moon S, Kim JS, Cho JS, Kim SW, Kim YH, Roh HJ, Shim WS, Rha KS, Kim SW, Lee SS, Kim DW, Cho KS, Yim HJ, Park SK, Rhee CS

Patents

- 07/2020 **Apparatus and method for predicting chronic kidney disease**
 South Korea
(Patent Registration No: KR 1020200000929)

06/2019 South Korea	Device and method for biometric age prediction model generation (Patent Registration No: KR 1020180156873)
06/2019 United States	Apparatus and method for predicting disease risk of metabolic disease (Patent Publication No: US20190172587A1)

Awards

07/2019	Young Investigator Award <i>The Korean Society of Cancer Prevention</i>
07/2018	Young Investigator Award <i>The Korean Society of Cancer Prevention</i>
07/2017	Young Investigator Award <i>The Korean Society of Cancer Prevention</i>

Certificates

SAS Certified Base Programmer for SAS 9
SAS Global Certification, Certificate Verification No.Y9V19JB12F4Q1T5X

Languages

English Fluent	Korean Native
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