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## Education background

- B.S., Biomedical Engineering, Yonsei University (2002)
- M.S., Graduate Program in Medical Engineering, Yonsei University (2005)
- Ph.D., Advanced Biomedical Engineering, Yonsei University (2011)

## Major careers

- 2018-2020 Assistant Professor, Department of Population Health Science and Policy, Icahn School of Medicine at Mount Sinai
- 2018 Assistant Research Professor, Department of Materials Science and Engineering (Institute for NanoBioTechnology), Whiting School of Engineering, Johns Hopkins University / Measurement Corps, Hopkins inHealth, Johns Hopkins University
- 2016 Postdoctoral Fellow, Measurement Corps, Hopkins inHealth, Johns Hopkins University / Institute for NanoBioTechnology, Whiting School of Engineering, Johns Hopkins University
- 2017 Research Associate, Measurement Corps, Hopkins inHealth, Johns Hopkins University / Institute for NanoBioTechnology, Whiting School of Engineering, Johns Hopkins University
- 2017-2018 SBIR/STTR Program Grant Reviewer, National Science Foundation (NSF)
- 2014-2015 Research Associate, Chronic Disease Informatics Program, Division of Geriatric Medicine and Gerontology, Johns Hopkins University

	<ul style="list-style-type: none"> <li>■ 2018-2020 Assistant Professor, Department of Population Health Science and Policy, Icahn School of Medicine at Mount Sinai</li> <li>■ 2012-2013 Postdoctoral Fellow, Chronic Disease Informatics Program, Division of Geriatric Medicine and Gerontology, Johns Hopkins University</li> <li>■ 2010-2011 Part-time Instructor, Biomedical Engineering, Yonsei University</li> <li>2010-2011 Part-time Instructor, Biomedical Engineering, Eulji University</li> <li>2011-2012 Postdoctoral Fellow, Department of Anesthesiology and Pain Medicine,</li> <li>■ 2008-2009 Visiting Researcher, Electrical Engineering, University of New South Wales Sydney</li> <li>2008-2011 Reserch Director, Nuga Medical</li> </ul>
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## **| Research**

### ■ Peer Reviewed Original Science Publications

- Jeong I, Liu J, Finkelstein J. Association Between System Usage Pattern and Impact of Web-Based Telerehabilitation in Patients with Multiple Sclerosis. *Stud Health Technol Inform.* 2020;272;346-349.
- Jeong I, Karpatkin H, Stein J, Finkelstein J. Relationship Between Exercise Duration in Multimodal Telerehabilitation and Quality of Sleep in Patients with Multiple Sclerosis. *Stud Health Technol Inform.* 2020;270;658-662.
- Robins D, Brody R, Jeong I, Parvanova I, Liu J, Finkelstein J. Towards a Highly Usable, Mobile Electronic Platform for Patient Recruitment and Consent Management. *Stud Health Technol Inform.* 2020;270;1066-1070.
- Finkelstein J, Jeong I, Karpatkin H. Physical Telerehabilitation Ameliorates Impact Of Multiple Sclerosis In

A Randomized Control Trial. *Mult Scler J.* 2020;26;159.

- Jeong I, Healy R, Bao B, Xie W, Madeira T, Sussman M, Whitman G, Schrack J, Zahradka N, Hoyer E, Brown C, Searson P. Assessment of Patient Ambulation Profiles to Predict Hospital Readmission, Discharge Location, and Length of Stay in a Cardiac Surgery Progressive Care Unit. *JAMA Network Open.* 2020;3(3);201074.
- Choi D, Kitchen G, Kim J, Li Y, Kim K, Jeong I, Nguyen J, Stewart J, Zeger S, and Searson P. Two Distinct Types of Sweat Profile in Healthy Subjects While Exercising at Constant Power Output Measured by a Wearable Sweat Sensor. *Scientific Reports.* 2019;9(1);1-9.
- Levitin A, Jeong I, Finkelstein J, Mining Electronic Dental Records to Identify Dry Socket Risk Factors. *Stud Health Technol Inform.* 2019;262:328-331.
- Boehm A, Jeong I, Finkelstein J, Whalen S, Graham R. Using Big Data to Uncover Patient Determinants of Care Utilization Compliance in a Student Dental Clinic. *Stud Health Technol Inform.* 2019;262:324-327.
- Jeong I, Papapanou P, Finkelstein J. Implant Failure Prediction Using Discriminant Analysis. *IEEE EMBS.* 2019; 3433-3437.
- Usability Inspection of Multipurpose Scalable Informed Consent Platform
- Jeong I, Bychkov D, Searson P. Wearable Devices for Precision Medicine and Health State Monitoring. *IEEE Trans Biomed Eng.* 2019;66(5);1242-1258.
- Walker T, Jeong I, Searson P, Kudchadkar S. 1429: A Novel Use of Infrared Sensors to Characterize Mobilization in Critically Ill Children. *Crit. Care Med.* 2019;47(1);691
- Jeong I, Liu Jiazhen, Finkelstein J. Factors Affecting Adherence with Telerehabilitation in Patients with Multiple Sclerosis. *Stud Health Technol Inform.* 2019;257:189-193.
- Zahradka N, Jeong I, Searson P. Distinguishing positions and movements in bed from load cell signals. *Physiol. Meas.* 2018;39(12);125001(11pp)
- Choi D, Thaxton A, Jeong I, Kim K, Sosnay P, Cutting G, Searson P. Sweat Test for Cystic Fibrosis:

Wearable Sweat Sensor vs. Standard Laboratory Test. *Journal of Cystic Fibrosis*. 2018;17(4):e35-e38.

· Jeong I, Bychkov D, Hiser S, Kreif J, Klein L, Hoyer E, Searson P. Using a Real Time Location System for Assessment of Patient Ambulation in a Hospital Setting. *Archives of Physical Medicine and Rehabilitation*. 2017;98(7):1366-1373.

· Finkelstein J, Jeong I. Machine Learning Approaches to Personalize Early Prediction of Asthma Exacerbations. *Ann. N.Y. Acad. Sci.* 2017;1387:153-165.

· Finkelstein J, Jeong I. Using CART for Advanced Prediction of Asthma Attacks Based on Telemonitoring Data. *IEEE UEMCON 2016*;1-5.

· Jeong I, Finkelstein J. Introducing Contactless Blood Pressure Assessment Using a High Speed Video Camera. *Journal of Medical System*. 2016;40(4):1-10.

· Jeong I, Finkelstein J. Comparative utility of time and frequency HRV domains for automated classification of exercise exertion levels. *IEEE Bioinformatics and Biomedicine*. 2015;983-989.

· Jeong I, Finkelstein J. Introducing Telerehabilitation in Patients with Multiple Sclerosis with Significant Mobility Disability: Pilot Feasibility Study. *IEEE ICHI*. 2015;69-75.

· Jeong I, Finkelstein J. Introducing Contactless Assessment of Heart Rate Variability Using High Speed Video Camera. *IEEE Sarnoff Symposium 2015*;7-11.

· Kukafka R, Jeong I, Finkelstein J. Optimizing Decision Support for Tailored Health Behavior Change Applications. *MEDINFO 2015: EHealth-enabled Health*. 2015;216:108-112.

· Finkelstein J, Cisse P, Jeong I. Feasibility of Interactive Resistance Chair in Older Adults with Diabetes. *Stud Health Technol Inform*. 2015;213:61-64.

· Jeong I, Finkelstein J. Real-Time Classification of Exercise Exertion Levels Using Discriminant Analysis of HRV Data. *Stud Health Technol Inform*. 2015;213:171-174.

· Bedra M, Hill Golder S, Cha E, Jeong I, Finkelstein J. Computerized Insulin Order Sets Can Lead to Unanticipated Consequences. *Stud Health Technol Inform*. 2015;213:53-56.

- Jeong I, Finkelstein J. Remotely controlled biking is associated with improved adherence to prescribed cycling speed. *Technology and Health Care*. 2015;23:S543-S549.
- Jeong I, Finkelstein J. Contactless blood pressure monitoring. *Stud Health Technol Inform*. 2015;210:1017.
- Jeong I, Finkelstein J. Interactive resistance chair to promote strengthening exercise in older adults. *Stud Health Technol Inform*. 2015;210:205-209.
- Kukafka R, Jeong I, Finkelstein J. Introducing Decision Support for Smart Mobile Health Behavior Change Applications. *Second International Conference on Big Data and Smart Computing (BigComp 2015)*. 2015:75-78.
- Finkelstein J, Jeong I. Using Heart Rate Variability for Automated Identification of Exercise Exertion Levels. *Stud Health Technol Inform*. 2015;208:137-141.
- Kukafka R, Jeong I, Finkelstein J. Determinants of Health Behavior Choices in Patients Using Computer-Mediated Decision Aid. *Stud Health Technol Inform*. 2015;208:226-231.
- Jeong I, Yoon H, Kang H, Yeom H. Effects of Skin Surface Temperature on Photoplethysmograph. *Journal of Healthcare Engineering*. 2014;5(4):429-438.
- Jeong I, Finkelstein J. Classification of Cycling Exercise Status Using Short-term Heart Rate Variability. *IEEE EMBS*. 2014:1782-1785.
- Finkelstein J, Jeong I. Adherence to Prescribed Cycling Speed in Remotely Controlled iBike System. *Stud Health Technol Inform*. 2014;205:1262.
- Jeong I, Finkelstein J. HRV Analysis to Identify Stages of Home-based Telerehabilitation Exercise. *Stud Health Technol Inform*. 2014;202:287-290.
- Sim M, Kim M, Jeong I, Park S, Yong S, Kim W, Yoon H. Development and evaluation of an improved technique for pulmonary function test using electrical impedance pneumography intended for the diagnosis of chronic obstructive pulmonary disease patients. *Sensors*. 2013;13(11):15846-15860.

- Finkelstein J, Jeong I. Remotely controlled cycling exercise system for home-based telerehabilitation. IEEE EMBS. 2013;7310-7313.
- Jeong I, Finkelstein J. Potential value of electrocardiogram and photoplethysmogram for non-invasive blood pressure estimation during exercise. IEEE EMBS. 2013;2304-2307.
- Jeong I, Finkelstein J. Applicability of the second derivative photoplethysmogram for non-invasive blood pressure estimation during exercise. Health Care Exchanges. 2013;1-5.
- Finkelstein J, Jeong I. Design and Implementation of Home Automated Telemanagement Platform for Interactive Biking Exercise (iBike HAT). Point-of-Care Healthcare Technologies. 2013;236-239.
- Jeong I, Finkelstein J. Introducing a Practical Approach for Non-Invasive Blood Pressure Monitoring during Home-based Telerehabilitation Exercise Program. Point-of-Care Healthcare Technologies. 2013;164-167.
- Finkelstein J, Jeong I. Feasibility of interactive biking exercise system for telemanagement in elderly. Stud Health Technol Inform. 2013;192:642-646.
- Jeong I, Finkelstein J. Optimizing non-invasive blood pressure estimation using pulse transit time. Stud Health Technol Inform. 2013;192:1998.
- Jeong I, Wood J, Finkelstein J. Using individualized pulse transit time calibration to monitor blood pressure during exercise. Stud Health Technol Inform. 2013;190:39-41.
- Jeong I, Finkelstein J. Interactive Biking Exercise (iBike) Platform to Facilitate Lower Extremity Cycling Exercise: System design and feasibility. Biomedical Engineering and Informatics. 2012;1091-1095.
- Jeong I, Finkelstein J. Computer-assisted upper extremity training using interactive biking exercise (iBike) platform. IEEE EMBS. 2012;6095-6099.
- Han K, Kim S, Jeong I, Lee Y, Chang S, Park B, Kim S. Electrophysiological and Behavioral Changes by Phosphodiesterase 4 Inhibitor in a Rat Model of Alcoholic Neuropathy. J Korean Neurosurg Soc. 2012;52(1):32-36.

- Sim M, Kim M, Jeong I, Yoon C, Yoon H. A Convenient Pulmonary Volume and Flow Detection System. IEEE EMBS. 2011;1009-1012.
- Jeong W, Sim M, Jung S, Kim M, Yoon C, Jeong I, Yoon H. Improvement of the Accuracy of Wrist Noninvasive Blood Pressure Measurement Using Multiple Bio-signals. Tans KIEE. 2011;60(8):1606-1616. (Korean)
- Hwang I, Noh Y, Jeong I, Yoon H. Optimized Exercise Load Control System Based on Heart Rate Variability. Biomed Eng Lett. 2011;1(4):232-238.
- Han Y, Noh Y, Jung J, Hwang I, Yoon U, Jeong I, Yoon H. Real-time Biosignal Monitoring System Using Android-Based Smartphone. KSOMBE. 2010;42. (Korean)
- Hwang I, Noh Y, Yoon U, Jung J, Han Y, Jeong I, Yoon H. Design of a MISO PID Controller for Real-time Biofeedback Exercise system. KSOMBE. 2010;42. (Korean)
- Yoon U, Jung J, Han Y, Hwang I, Noh Y, Jeong I, Yoon H. The variation of ECG signal RMS value on various skin moisture using Textile electrode. KSOMBE. 2010;41. (Korean)
- Jung J, Noh Y, Kim M, Yoon U, Han Y, Hwang I, Yoon H, Jeong I. A Preliminary Study on Autonomic Nervous System Assessment during Aerobic Exercise using Skin Temperature Variability. Biomedical Engineering and Sciences. 2010;261-264.
- Yoon U, Noh Y, Hwang I, Jung J, Han Y, Yoon H, Jeong I. Electrocardiogram Signal Processing Method for Exact HR Detection in Physical Activity Monitoring System: Wavelet Approach. Biomedical Engineering and Sciences. 2010;232-235.
- Noh Y, Yoon U, Hwang I, Jung J, Han Y, Yoon H, Jeong I. Development of Sports Health Care System Proper to the Fitness Club Environment. Biomedical Engineering and Sciences. 2010;93-96.
- Yoon U, Hwang I, Noh Y, Jeong I, Yoon H. Comparison of CWT with DWT for Detecting QRS Complex on Wearable ECG Recorder. Wavelet Analysis and Pattern Recognition. 2010;300-303.
- Jeong I, Jun S, Kim M, Um D, Oh J, Yoon H. Non-Invasive Estimation of Systolic Blood Pressure and Diastolic Blood Pressure Using Photoplethysmograph Components. YMJ. 2010;51(3):345-353.

- Jung W, Sim M, Jung S, Jeong I, Yoon H. The multi-dimensional bio signal instrumentation system for estimating cardiovascular and pulmonary status. KSOMBE. 2009;40. (Korean)
  
- Hwang I, Jung J, Noh Y, Yoon U, Han Y, Jeong I, Yoon H. Development of Real-time Biofeedback Exercise Prescription System Using PID. KSOMBE. 2009;40. (Korean)
  
- Sim M, Jung S, Jung W, Kim M, Jeong I, Yoon H. Development of Pulmonary Function Test System Using Electrical Tetrapolar Electrode Impedance Method. KSOMBE. 2009;40. (Korean)
  
- Jung S, Sim M, Jung W, Jeong I, Yoon H. Detection of Optimal Point by 4 Electrodes Method for Estimation of Cardiac Output using Impedance Cardiography. KSOMBE. 2009;40. (Korean)
  
- Noh Y, Han Y, Yoon U, Hwang I, Jung J, Jeong I, Yoon H. Consideration from Parameters based on age for Estimation of Maximal Heart Rate. KSOMBE. 2009;40. (Korean)
  
- Yoon U, Noh Y, Hwang I, Jung J, Han Y, Jeong I, Yoon H. To detect ECG using wearable sensor and cancelling noise using wavelet during exercise. KSOMBE. 2009;40. (Korean)
  
- Park S, Jeong I, Sim M, Sim Y, Kong I, Shin T, Yoon H. Maximum Fat Oxidation and Autonomic Changes during Exercise. KSOMBE. 2009;39. (Korean)
  
- Lim T, Seo K, Jeong I, Jun S, Noh Y, Kim E, Yoon H. Novel Impedance Method for Analyzing Truncal Obesity. Tans KIEE. 2009;58(4):849-856. (Korean)
  
- Jun S, Jeong I, Jung S, Yoon H. Estimation of the Variation of Quantity in PWV in Accordance with the Changes of Position in Human. J Biomed Eng Res. 2009;30(2):129-134. (Korean)
  
- Jeong I, Jun S, Park S, Jung S, Shin T, Yoon H. A Research for evaluation on Stress Change via Thermotherapy and Massage. IEEE EMBS. 2008;4820-4823.
  
- Park S, Jeong I, Sim M, Yoon U, Shin T, Yoon H. Development of Bio-signal Measurement system for Sports Healthcare. IEEE EMBS. 2008;534-537.
  
- Kim K, Choi H, Sim M, Jeong I, Yoon H. Compensation on Impedance of the Stratum Corneum. JEET.



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- Jung S, Choi W, Noh Y, Jeong I, Yoon H. A Treadmill Control Using Standard Deviation of Heart Rate Variability. KSOMBE. 2007;36. (Korean)
- Sim M, Choi H, Jeong I, Kim K, Yoon H. A Study for Abnormal-Tissue Detection using Skin Impedance method with Embedded system. KSOMBE. 2007;36. (Korean)
- Sim M, Choi H, Jeong I, Kim K, Yoon H. A Study for Estimation of Scalp Condition by Impedance. CICS. 2007;471-472. (Korean)
- Choi H, Sim M, Jeong I, Kim K, Yoon H. Research for the compensation on impedance of the stratum corneum. KSOMBE. 2007;35. (Korean)
- Lee D, Jeong I, Jun S, Park S, Yoon H. A Study of Continuous Blood Pressure Evaluation by Morphological Analysis of Photoplethysmographic Signal: Clinical Experiments. KSOMBE. 2007;35. (Korean)
- Jeong I, Jun S, Lee D, Yoon H Development of Bio Signal Measurement System for Vehicles. Convergence Information Technology. 2007;1091-1096.
- Jeong I, Lee D, Park S, Ko J, Yoon H. Automobile Driver's Stress Index Provision system That Utilizes Electrocardiogram. IEEE IV. 2007;652-656.
- Jeong I, Choi Y, Park S, Yoon H. A Study on Compensation of Error Rate in Noninvasive Blood Pressure Measurement System using Tactile Sensor. IFMBE Proceedings. 2007;6:4127-4130.
- Jeong I, Ko J, Lee D, Hwang S, Yoon H. New Algorithms for compensation of Error Rate in Noninvasive Blood Pressure Measurement System Using Optical Sensors. IFMBE Proceedings. 2007;6:4123-4126.
- Ko J, Jeong I, Lee D, Park S, Hwang S, Park S, Kim G, Joo H, Yoon H. Compensation of Error in Noninvasive Blood Pressure Measurement System Using Optical Sensor. J Biomed Eng Res. 2007;28(2):178-186. (Korean)
- Jeong I, Choi Y, Yoon H. Compensation of the Error Rate for the Non-invasive Sphygmomanometer System Using a Tactile Sensor. JEET. 2007;2(1):136-141.

- Choi H, Sim M, Jeong I, Kim K, Yoon H. A simulation for the estimation of moisture on stratum corneum using various distances of electrodes. KSOMBE. 2006;34. (Korean)
  
- Park S, Jeong I, Lee D, Yoon H. The Blood Pressure Estimation System using Interpolated PPG signal. KSOMBE. 2006;34. (Korean)
  
- Lee D, Jeong I, Park S, Yoon H. A Study of Continuous Blood Pressure Evaluation by Morphological Analysis of Photoplethysmographic Signal: Animal Experiments. KSOMBE. 2006;34. (Korean)
  
- Jeong I, Ko J, Hwang S, Yoon H. A New Method to estimate Arterial Blood Pressure using Photoplethysmographic Signal. IEEE EMBS. 2006;4667-4670.
  
- Ko J, Jeong I, Park S, Yoon H. Design of Mobile Bioelectric Signal Measurement System, KSOMBE. 2005;33. (Korean)
  
- Jeong I, Shin T, Yoon H. Estimation of Non-Invasive Blood Pressure Using Peripheral Plethysmograph. Tans KIEE 2005;54D(8):504-509. (Korean)
  
- Yeom H, Jeong I, Yoon H. Design of FPGA IIR Notch filter 60 Hz interference for real-time. KSOMBE. 2002;27. (Korean)

#### ■ Educational Publications

##### Books, Textbooks

1. Jeong I, Yeom H, Yoon H. Design of Circuits for Medical Devices. Shinkwang. 2009; ISBN 978-89-6451-004-9. (Korean)
  
2. Jeong I, Kim J, Yoon H. Design and Manufacture of Electronic Medical Devices. Shinkwang. 2007; ISBN 978-89-7069-928-8. (Korean)

## **I Miscellaneous**

#### ■ Awards, Professional Accomplishments

2013 Nomination of "Distinguished Poster Awards," American Medical Informatics Association (AMIA) Annual Symposium.

2010 "Best Paper Presentation," Korean Society of Medical and Biological Engineering Conference

■ Keynote Speaker

2018 The 9th IEEE Annual Ubiquitous Computing, Electronics and Mobile Communication Conference  
2018, New York, NY, USA

■ Conference Organizer, Session Chair, Invited Speaker

2019 Invited Speaker, Cutting Edge Strategies to Increase Pulmonary Rehabilitation Participation: Recent NHLBI Research Funding with Early Results, 34th Annual Meeting of American Association of Cardiovascular and Pulmonary Rehabilitation, Portland, OR, USA

2018 Towards an individual digital health state profile, DASAN Conference 2018, Korean Federation of Science and Technology Societies, Seoul, Republic of Korea

2017 Invited Speaker, Current Wearable Sports Devices and System for Health Promotion, Seoul National University, Seoul, Republic of Korea

2017 Invited Speaker, Johns Hopkins Individualized Health: the Mission of Measurement Corps, Wonju Medical Industry Techno-valley, Wonju, Republic of Korea

2017 Invited Speaker, Johns Hopkins Individualized Health: Harnessing Scientific Knowledge to Improve Clinical Decisions, Kyung Hee University Medical Center, Seoul, Republic of Korea

2016 Invited Speaker, The Johns Hopkins Individualized Health Initiative (Hopkins inHealth): the Mission of Measurement Corps, Korea Research Institute of Standards and Science, Seoul, Republic of Korea

2013 Invited Speaker, Remotely Controlled Interactive Biking Exercise (iBike) Platform for Home-based Tele-rehabilitation, Department of VA/Multiple Sclerosis Center of Excellence, Baltimore, MD, USA

2013 Session Co-chair, Smart Homes and Ambient Assisted Living I, 30th Annual International Conference of the IEEE Engineering in Medicine and Biology Society, Osaka, Japan

■ Inventions, Patents, Copyrights

2017 Jeong I, Kim H, Kim T, Yoon U, Cho S, Lee J, Yi K. Prescribing System for Exercise. KR101777312.

2016 Jeong I, Yoon H, Hwang I, Noh Y, Jung J, Yoon U, Cho S, Kim H, Lee J, Yi K, Han Y. Automatic Control

System of Sport Apparatus by User's Condition. KR01655753.

2016 Jeong I, Jung J, Han Y, Yoon J, Yoon U, Noh Y, Cho S, Lee J, Yi K, Jung S, Jeong W. Treadmill Speed Control Method Using ANOVA of RR Interval of ECG. KR101649935.

2016 Jeong I, Searson P, Bychkov D. A Smart PCA Pump Interface for Pain Management. JHU Invention Disclosure D14378

2016 Jeong I, Searson P, Bychkov D, William S. Digital Pain and Vital Sign Journal. JHU Invention Disclosure D14294

2016 Jeong I, Searson P, Bychkov D. Continuous Automated Assessment of Patient Mobility and Risk for Pressure Ulcers from Load Cells in Hospital Beds. JHU Invention Disclosure D14244

2016 Jeong I, Searson P, Bychkov D. Remote Tracking Location System for Patient Ambulation Monitoring. JHU Invention Disclosure D14037

2016 Jeong I, Cho S, Kim H, Lee J, Yi K, Yoon U. Exercise Management System Interlocking with Smart Phone. KR101586661.

2014 Jeong I, Yoon H, Hwang I, Noh Y, Jung J, Yoon U, Cho S, Kim H, Lee J, Yi K, Han Y. Customized Exercise Apparatus Control System for Establishing Target Heart Rate Zone. KR1013555060000.

2013 Jeong I, Yoon H, Shin T, Kim T, Chol W, Jung J, Han Y, Yoon J, Noh Y, Cho S, Lee J, Yi K, Jung S, Jeong W. Real-time Ventilation Threshold Point Detection Method through the Monitoring of Heart Rate Changes, capable of Deducing the Feeling of being Bound of an Exerciser. KR 101333511.

2013 Jeong I, Kim H, Kim T, Yoon U, Cho S, Lee J, Yi K. Prescribing System for Exercise and thereof Method. KR101315907.

2013 Jeong I, Kim H, Yoon H, Noh Y, Yoon U, Hwang I, Jung J, Cho S, Lee J, Yi K, Shin T, Kim T, Choi W. Exercise Prescription Method, capable of Suggesting an Exercise Prescription Suitable for a User by Presuming and Individual Maximum Oxygen Intaking Amount. KR101301305.

2013 Jeong I, Park Y, Yoon H, Lee K, Baek Y, Cho S, Kim H, Lee J, Yi K. Method for Detecting a Peak and

Analyzing Rhythm in Real Time by using Discrete Wavelet Transform for an Exercise. KR101301304.

2013 Jeong I, Jung J, Han Y, Yoon J, Yoon U, No Y, Cho S, Lee J, Yi K, Jung S, Jeong W. Method for Controlling Treadmill Velocity through Analysis of Heart Beat Interval Variance and System thereof. WO2013035916.

2012 Jeong I, Yoon H, Noh Y, Yoon U, Hwang I, Jung J, Cho S, Lee J, Yi K. Bio-signal Measurement Unit of an Exercise Prescription System based on a Detected Bio-signal of an Exerciser. KR 101203902.

2011 Jeong I, Cho S, Park S, Sim M, Kim T, Shin T, Yoon H. Exercise Management System using Biofeedback. KR101044883.

2011 Jeong I, Ko J, No Y, Jun S, Nam K, Seo K, Yoon H. Bio-signal Measurement Device of Mouse Type. KR101042827.

2011 Jeong I, Cho S, Park S, Sim M, Kim T, Shin T, Yoon H. Potable Terminal for Measuring a Biosignal, Capable of Measuring Electrocardiogram, a Body Temperature, and Activity of a User. KR101030887.

2011 Jeong I, Kim H, Yoon U, Cho S, Lee J, Yi K. Exercise Prescription System. WO2011025322.

2011 Jeong I, Yoon U, Cho S, Lee J, Yi K. Exercise Prescription System. WO2011025075.

2010 Jeong I, Choi H, Sim M, Kim K, Yoon H. Special Electrode to Compensate Error Caused by Thickness Fluctuations at Skin Impedance Measurement. KR100963874.

2008 Jeong I, Park W, Yoon H. System for Providing Driver's Stress Index using ECG. KR100851383.

2006 Jeong I, Yoon H, Ko J, Seo K. Hand-held Type Blood Pressure Monitoring System using PPG signal. KR100660349

2006 Jeong I, Yoon H. Mobile Radio Terminal with Blood Pressure Monitoring System PPG signal. KR100650044.