## **JUNG SUN YOO**

## [Personal]



Position Title: <u>Assistant Professor of Department of Health Technology and Informatics, Deputy Programme Leader of Master of Science in Medical Physics Programme of The Hong Kong Polytechnic University</u>

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GoogleScholar ID: FO79tuEAAAAJ

## A. Education

Degree	Institution	Year(s)	Field of Study
Ph.D.†	Seoul National University	01 Mar. 2004	Biomedical
	Department of Physics and Astronomy	~31 Aug. 2009	Physics
B.S.	Seoul National University	01 Mar. 2000	Physics
	Department of Physics Education	~26 Feb. 2004	education

†Advisor Soh, Kwang-Sup (Theoretical physics, Biomedical physics)

Thesis In vivo Tracking of Cancer Cells in Bonghan Channels using Multispectral Fluorescence Imaging System

## B. Employment and Other Experience

Oct. 11. 2016 – present **Assistant Professor** 

Department of Health Technology and Informatics, Faculty of Health and Social Sciences, <u>The Hong Kong Polytechnic University</u>, Hong Kong

Sep. 02. 2020 – present Deputy Programme Leader

Master of Science in Medical Physics Programme, Faculty of Health and Social Sciences, The Hong Kong Polytechnic University, Hong Kong

Jan. 01. 2017 – Dec. 31. 2018 Honorary Research Fellow

Nano-Bio Research Laboratory, Advanced Institutes of Convergence Technology, Seoul National University, South Korea

Mar. 01. 2014 – Oct. 10. 2016 **BK Assistant Professor** 

Smart Humanity Convergence Center, Program in Biomedical Radiation Sciences, Department of Transdisciplinary Studies, Graduate School of Convergence Science and Technology, Seoul National University, Republic of Korea

Nov. 01. 2014 – Oct. 10. 2016 Research Scientist (Joint Researcher)

Center for Nanomolecular Imaging and Innovative Drug Development, Institute of Bio Convergence, Advanced Institutes of Convergence Technology, Republic of Korea

Feb. 01, 2011 – Oct. 31, 2013 Research Fellow

Department of Chemistry, Faculty of Science, <u>National University of Singapore</u>, Singapore Singapore Bioimaging Consortium, <u>Agency for Science, Technology and Research</u>, Singapore

Prof. Young-Tae Chang +82-54-279-2101, ytchang@postech.ac.kr

Sep. 01. 2009 – Jan. 31. 2011 Postdoctoral Research Associate

College of Natural Sciences, Seoul National University, Republic of Korea

The Research Institute of Basic Sciences, <u>Seoul National University</u>, Republic of Korea

Prof. Kwang-Sup Soh +82-10-6324-0398, kssoh1@gmail.com

Apr. 01. 2007 – Mar. 31. 2008 Visiting Student (Internship)

Chair for Biological Imaging, School of Medicine, School of Engineering, <u>Technical University</u> of Munich, Germany

Institute of Biological and Medical Imaging, <u>Helmholtz Center Munich - German Research</u> Center for Environmental Health, Germany

Prof. Vasilis Ntziachristos +49-89-3187-3852, v.ntziachristos@tum.de

Dec. 20. 2005 – Feb. 28. 2006 Visiting Student (Internship)

<u>Harvard Medical School</u>, Department of Radiology, <u>Massachusetts General Hospital</u> Department of Medicine, Brigham and Women's Hospital, USA

Instructor Dr. Hyung-Hwan Kim +1-617-643-7334, Kim.HyungHwan@mgh.harvard.edu

Mar. 01. 2004 – Feb. 28. 2006 **Teaching Assistant** 

Department of Physics and Astronomy, Seoul National University, Republic of Korea

Sep. 01. 2003 – Feb. 29. 2004 Undergraduate Research Internship

Department of Physics and Astronomy, <u>Seoul National University</u>, Republic of Korea Prof. Kwang-Sup Soh +82-10-6324-0398, kssoh1@gmail.com

## C. Teaching of Students in Courses

- 1. 19 January 2021 04 May 2021 (2020/21 Sem2), 13 January 2022 21 April 2022 (2021/22 Sem2), MSc in Medical Physics students, **Medical Imaging Physics** (HTI5003), The Hong Kong Polytechnic University, Hong Kong, 3hr sessions per wk for 13 wks, given in English
- 2. 15 January 2018 21 April 2018 (2017/18 Sem2), 14 January 2019 20 April 2019 (2018/19 Sem2), 11 February 2020 13 May 2020 (2019/20 Sem2), 22 January 2021 15 May 2021 (2020/21 Sem 2), 14 January 2022 14 April 2022 (2021/22 Sem2), 2<sup>nd</sup> year Radiography (Medical Imaging) undergraduate students, BSc (Hons) in Radiography, **Medical Imaging Instrumentation** (HTI28101), The Hong Kong Polytechnic University, Hong Kong, 3hr sessions per wk for 13 wks, given in English
- 3. 04 September 2017 02 December 2017 (2017/18 Sem1), 03 September 2018 01 December 2019 (2018/19 Sem1), 02 September 2019 26 November 2019 (2019/20 Sem1), 11 September 2020 14 December 2020 (2020/2021 Sem1), 40 April 2021 29 November 2021 (2021/2022 Sem1), 2<sup>nd</sup> year Radiography (Medical Imaging & Radiotherapy) undergraduate students, BSc (Hons) in Radiography, **Radiographic Imaging Science** (HTI27104), The Hong Kong Polytechnic University, Hong Kong, 3hr sessions per wk for 13 wks, given in English
- 4. 04 September 2017 02 December 2017 (2017/18 Sem1), 03 September 2018 01 December 2019 (2018/19 Sem1), 13 February 2020 7 May 2020 (2019/20 Sem2), 31 August 30 November 2021 (2021/22 Sem1), MSc in Medical Imaging and Radiation Science, Advanced Technology and Clinical Application in Nuclear Medicine Imaging (HTI5725), The Hong Kong Polytechnic University, Hong Kong, 3hr sessions per wk for 13 wks, given in English
- 5. 18 April 2017, 12 March 2018, 25 March 2019, 20 April 2020, 30 March 2021, 21 March 2022, 3<sup>rd</sup> year Radiography (Medical Imaging & Radiotherapy) undergraduate students, BSc (Hons) in Radiography, **Imaging in Radiotherapy**, The Hong Kong Polytechnic University, Hong Kong, 2hr session (Title: Functional and Molecular Imaging in Radiotherapy), given in English
- 6. 14 January 2019 20 April 2019 (2018/19 Sem1), 10 February 11 May 2020 (2019/20 Sem1), 3<sup>rd</sup> year Radiography (Medical Imaging) undergraduate students, BSc (Hons) in Radiography, **Computed Tomography** (HTI48101), The Hong Kong Polytechnic University, Hong Kong, 3hr sessions per wk for 13 wks, given in English
- 7. 03 September 2018 01 December 2019 (2018/19 Sem1), 1st year BSc undergraduate students of Faculty of Health and Social Sciences, **Freshman Seminar for Broad Disciplines and Health Sciences** (HSS1010), The Hong Kong Polytechnic University, Hong Kong, 2hr sessions per 2 wks for 13 wks, given in English
- 8. 01 March 2016 30 June 2016, Graduate students, Lecture on Immunology, Gachon

- University, Department of Food Science and Biotechnology, Seongnam, Gyeonggi-do, Korea, 3 hr sessions per wk for 16 wks, given in English
- 9. 01 March 2016 30 June 2016, Graduate students, **Molecular Imaging as a Convergence Science**, Seoul National University, Graduate School of Convergence Science and Technology, Suwon, Korea, 3 hr sessions per wk for 16 wks, team teaching, given in Korean
- 10.01 March 2010 28 February 2011, 2<sup>nd</sup> year Oriental Medicine undergraduate students, **Physics for Oriental Medicine**, Wonkwang University, Iksan, Korea, 2 hr sessions per wk for 31 wks, given in Korean

## D. Honors and Fellowship

1 April 2022	2020-2021 Outstanding Reviewer Award from Journal of Imaging, 300 Swiss francs
14 Nov. 2014	KOFWST Future Talent Award from Korea Federation of Women's Science & Technology Associations (KOFWST), KRW 1,000,000
25 July 2014	Conference and Training Participation Support for Non-Regular Researchers from Center for Women in Science, Engineering and Technology (WISET), KRW 2,500,000
11 Oct. 2009	Young Scientist Award for the Acupuncture and Meridian Studies Awards 2009 from the International Pharmacopuncture Institute (IPI), USD 5,000
31 Aug. 2009	Graduate Student Research Award-Second Place from the Seoul National University, KRW 500,000
11 Mar. 2005 - 28 Feb. 2007	<u>Seoul Science Fellowship</u> from Seoul Metropolitan Government, KRW 11,000,000
26 Feb. 2004	Secondary teaching certificate for physics in the Republic of Korea (Ref. no. 16466)

#### \*List of Prizes and Awards of Research Postgraduate Students under my Supervision

16 June 2022	3rd Prize from Department of Health Technology and Informatics
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of the Hong Kong Polytechnic University, Postgraduate Symposium 2022, **Ms. Minfeng Yang** (16 June 2022, Department of Health Technology and Informatics, The Hong Kong Polytechnic University, Minfeng Yang, Kenneth Cheng, **Jung Sun Yoo\***: Label-free metabolic imaging for sensitive and robust monitoring of anti-CD47 immunotherapy response in triple-negative breast cancer)

triple-negative breast cancer

7-11 September <u>Young Investigator Award</u> from World Federation of Nuclear 2022 Medicine and Biology (WFNMB), The 13<sup>th</sup> Congress of the

World Federation of Nuclear Medicine and Biology (WFNMB 2022). **Mr. Chung Ting Tang**, Registration fee exemption (September 7-11, 2022, Kyoto International Conference Center, Japan & Hybrid meeting, Chung Ting Tang, ZeBang He, Alex Nagi Nick Wong, Boom Ting Kung, Tin Kun Au Yong, **Jung Sun Yoo\***: Deep Learning to Reduce Scan Time and Radiation Dose

in Myocardial Perfusion Imaging SPECT)

6 October 2021 Women in Molecular Imaging Network Scholar Award from the

Women in Molecular Imaging Network (WIMIN), World Molecular Imaging Congress Virtual 2021 (WMIC Virtual 2021).

Ms. Minfeng Yang, USD 100, October 6, 2021 (Virtual

conference, October 5-8, 2021, Minfeng Yang, **Jung Sun Yoo\***: Label-free metabolic imaging for sensitive and robust monitoring of anti-CD47 immunotherapy response in triple negative breast cancer)

23 June 2021

<u>2<sup>nd</sup> Prize</u> from Department of Health Technology and Informatics of the Hong Kong Polytechnic University, Postgraduate Symposium 2021, **Mr Nagi Nick Alex Wong** (23 June 2021, Department of Health Technology and Informatics, The Hong Kong Polytechnic University, Ngai Nick Alex Wong, **Jung Sun Yoo\***: Prioritization on whole-slide images of clinical gastric carcinoma biopsies through a weakly supervised and annotation-free system)

14 June 2019

<u>2<sup>nd</sup> Prize</u> from Department of Health Technology and Informatics of the Hong Kong Polytechnic University, Postgraduate Symposium 2019, **Mr Nagi Nick Alex Wong** (14 June 2019, Department of Health Technology and Informatics, The Hong Kong Polytechnic University, Ngai Nick Alex Wong, **Jung Sun Yoo\***: Intraoperative imaging technique to highlight peripheral nerves using polarized spectral reflectance)

14 Dec. 2018

Certificate of Excellence from Organizing Committee of 2018 International Symposium on NanoBiotechnology, Biosensors and Biochips (2018 ISNBB, Organized by Asian Federation of Biotechnology (AFOB), Chinese Society of Biotechnology (CSBT), City University of Hong Kong (CityU)), **Mr Ngai Nick Alex Wong** (City University of Hong Kong, December 13-14, 2018, Ngai Nick Alex Wong, **Jung Sun Yoo\***: Intraoperative Imaging System to Highlight Peripheral Nerves using Polarized Spectral Reflectance)

25 Aug. 2016

<u>Poster Award</u> from Korean Association for Laboratory Animal Science (KALAS), 2016 KALAS International Symposium, **Ms Ga Ram Kim** (Hwabaek International Convention Center, Gyeongju, Korea, August 24-26, 2016, Ga Ram Kim, Sang Eun Kim, <u>Jung Sun Yoo\*</u>: Intraoperative Visualization of Nerve for Surgical Guidance with No Exogenous Label using Spectral Reflectance Imaging)

# E. Peer-reviewed Publications (in descending chronological order)

Total # of peer-reviewed papers: 37 including 29 SCI(E) papers

h-index: 21 (Google Scholar, 2022 July)

Total # of citations: 1951 (Google Scholar, 2022 July)

- Minfeng Yang, Alex Nagi Nick Wong, Arpan Mahanty, <u>Jung Sun Yoo\*</u>: Label-free metabolic imaging for sensitive and robust monitoring of anti-CD47 immunotherapy response in triplenegative breast cancer, <u>Journal for ImmunoTherapy of Cancer</u>, 10, e005199, **2022 September** 12 (\*corresponding author)
- 2. Martin Ho Yin Yeung, Ka Long Leung, Lai Yuen Choi, <u>Jung Sun Yoo</u>, Susan Yung, Pui-Kin So and Chi-Ming Wong: Lipidomic Analysis Reveals the Protection Mechanism of GLP-1 Analogue Dulaglutide on High-Fat Diet-Induced Chronic Kidney Disease in Mice, <u>Frontiers in Pharmacology</u>, 12, 777395, **2022 March 01**
- 3. Minfeng Yang, In Young Oh, Arpan Mahanty, Wei-Lin Jin\*, <u>Jung Sun Yoo\*</u>: Immunotherapy for Glioblastoma: Current State, Challenges, and Future Perspectives, <u>Cancers</u>, 12(9): 2334, **2020 August 19** (\*corresponding author)

- 4. Nunzio Denora, Chaedong Lee, Rosa Maria Iacobazzi, Ji Young Choi, In Ho Song, <u>Jung Sun Yoo</u>, Yuanzhe Piao, Antonio Lopalco, Francesco Leonetti, Byung Chul Lee, Sang Eun Kim: TSPO-targeted NIR-fluorescent ultra-small iron oxide nanoparticles for glioblastoma imaging, *European Journal of Pharmaceutical Sciences*, 139: 105047, **2019 November 1**
- 5. Chaedong Lee, Ga Ram Kim, Juhwan Yoon, Sang Eun Kim, <u>Jung Sun Yoo\*</u>, Yuanzhe Piao\*: *In Vivo* delineation of glioblastoma by targeting tumor-associated macrophages with near-infrared fluorescent silica-coated iron oxide nanoparticles in orthotopic xenografts for surgical guidance, <u>Scientific Reports</u>, 8: 11122, **2018 July 24** (\*corresponding author)
- 6. Bo Quan, Chaedong Lee, <u>Jung Sun Yoo\*</u>, Yuanzhe Piao\*: Facile scalable synthesis of highly monodisperse small silica nanoparticles using alkaline buffer solution and their application for efficient lymph node mapping, <u>Journal of Materials Chemistry B</u>, 5: 586-594, **2017 January 1** (\*corresponding author)
- 7. Min Su Lee, Hyun Soo Park, Byung Chul Lee, Jae Ho Jung, <u>Jung Sun Yoo\*</u>, Sang Eun Kim\*: Identification of Angiogenesis Rich-Viable Myocardium using RGD Dimer based SPECT after Myocardial Infarction, <u>Scientific Reports</u>, 6: 27520, **2016 June 10** (\*corresponding author)
- 8. Haeyun Jang, Chaedong Lee, Gi-Eun Nam, Bo Quan, Hyuck Jae Choi, <u>Jung Sun Yoo</u>, Yuanzhe Piao: *In Vivo* Magnetic Resonance and Fluorescence Dual Imaging of Tumor Sites by using Dye-Doped Silica-Coated Iron Oxide Nanoparticles, <u>Journal of Nanoparticle Research</u>, 18(2):41, **2016 February 8**
- 9. <u>Jung Sun Yoo</u>, Jonghwan Lee, Jae Ho Jung, Byung Seok Moon, Soonhag Kim, Byung Chul Lee, Sang Eun Kim: SPECT/CT Imaging of High-Risk Atherosclerotic Plaques using Integrin-Binding RGD Dimer Peptides, <u>Scientific Reports</u>, 5: 11752, **2015 June 30**
- 10. Satoshi Arai, Madoka Suzuki, Sung-Jin Park, <u>Jung Sun Yoo</u>, Lu Wang, Nam-Young Kang, Hyung-Ho Ha, Young-Tae Chang: Mitochondria-targeted Fluorescent Thermometer Monitors Intracellular Temperature Gradient, <u>Chemical Communications</u>, 51(38): 8044-8047, **2015 May**
- 11. <u>Jung Sun Yoo</u>, Raj Kumar Das, Zhi Yen Jow, Young-Tae Chang: *In Vivo* Detection of Macrophage Recruitment in Hind-limb Ischemia using a Targeted Near-Infrared Fluorophore, <u>PLoS ONE</u>, 9(7): e103721, **2014 July 29**
- 12. Jung Sun Yoo, Kwang-Sup Soh: A Transformative Approach to Cancer Metastasis: Primo Vascular System as a Novel Microenvironment for Cancer Stem Cells, <u>Cancer Cell & Microenvironment</u>, 1(3): e142, **2014 July 2**
- 13. Jung Sun Yoo, Sung-Chan Lee, Zhi Yen Jow, Pamela Yun Xiang Koh, Young-Tae Chang: A Macrophage-Specific Fluorescent Probe for Intraoperative Lymph Node Staging, <u>Cancer Research</u>, 74(1): 44-55, **2014 January 1**
- 14. Jaekwan Lim, Sungwoo Lee, Zhendong Su, Hong Bae Kim, <u>Jung Sun Yoo</u>, Kwang-Sup Soh, Sungchul Kim, and Yeon Hee Ryu: Primo Vascular System Accompanying a Blood Vessel from Tumor Tissue and a Method to Distinguish It from the Blood or the Lymph System, <u>Evidence-Based Complementary and Alternative Medicine</u>, 2013: 949245, **2013 May**
- 15. Jung Sun Yoo, Hong Bae Kim, Nayoun Won, Jiwon Bang, Sungjee Kim, Saeyoung Ahn, Byung-Cheon Lee, and Kwang-Sup Soh: Evidence for an Additional Metastatic Route: *In Vivo* Imaging of Cancer Cells in the Primo-Vascular System around Tumors and Organs, *Molecular Imaging and Biology*, 13(3): 471-480, **2011 June**
- 16. Vasilis Ntziachristos, <u>Jung Sun Yoo</u>, Gooitzen M. van Dam: Current Concepts and Future Perspectives on Surgical Optical Imaging in Cancer, <u>Journal of Biomedical Optics</u>, 15(6): 066024. **2010 November/December**
- 17. Ping An, Jingxing Dai, Zhendong Su, <u>Jung Sun Yoo</u>, Rongmei Qu, Sung-Woo Lee, Ki-Hoon Eom, Kyang-Hee Bae, Hesheng Luo, Kwang-Sup Soh: Putative Primo-vascular System in Mesentery of Rats, <u>Journal of Acupuncture and Meridian Studies</u>, 3(4): 232-240, **2010**December
- 18. <u>Jung Sun Yoo,</u> Nayoun Won, Hong Bae Kim, Jiwon Bang, Sungjee Kim, Saeyoung Ahn, and Kwang-Sup Soh: *In Vivo* Imaging of Cancer Cells with Electroporation of Quantum Dots and Multispectral Imaging, <u>Journal of Applied Physics</u>, 107(12): 124702, **2010 June 15**

- 19. <u>Jung Sun Yoo,</u> M. Hossein Ayati, Hong Bae Kim, Wei-bo Zhang, and Kwang-Sup Soh: Characterization of the Primo-Vascular System in the Abdominal Cavity of Lung Cancer Mouse Model and Its Differences from the Lymphatic System, <u>PLoS ONE</u>, 5(4): e9940, **2010 April**
- 20. <u>Jung Sun Yoo</u>, George Themelis, Kwang-Sup Soh, Ralf Schulz, and Vasilis Ntziachristos: Real-time Intraoperative Fluorescence Imaging System using Light-absorption Correction, *Journal of Biomedical Optics*, 14(6): 06412, **2009 November/December**
- 21. Jung Sun Yoo, Hong Bae Kim, Vyacheslav Ogay, Byung-Cheon Lee, Saeyoung Ahn, and Kwang-Sup Soh: Bonghan Ducts as Possible Pathways for Cancer Metastasis, *Journal of Acupuncture and Meridian Studies*, 2(2): 118-123, **2009 June**
- 22. George Themelis, <u>Jung Sun Yoo</u>, and Vasilis Ntziachristos: Multispectral Imaging using Multiple-bandpass Filters, <u>Optics Letters</u>, 33(9): 1023-1025, **2008 May**
- 23. <u>Jung Sun Yoo</u>, Min Su Kim, Vyacheslav Ogay, and Kwang-Sup Soh: *In Vivo* Visualization of Bonghan Ducts inside Blood Vessels of Mice by using an Alcian Blue Staining Method, <u>Indian Journal of Experimental Biology</u>, 46(5): 336-339, **2008 May**
- 24. Byung-Cheon Lee, <u>Jung Sun Yoo</u>, Ku Youn Baik, Baeckkyoung Sung, Jawoong Lee, and Kwang-Sup Soh: Development of a Fluorescence Stereomicroscope and Observation of Bong-Han Corpuscles inside Blood Vessels, <u>Indian Journal of Experimental Biology</u>, 46(5): 330-335, **2008 May**
- 25. Baeckkyoung Sung, Min Su Kim, Byung-Cheon Lee, <u>Jung Sun Yoo</u>, Sang-Hee Lee, Youn-Joong Kim, Ki-Woo Kim, and Kwang-Sup Soh: Measurement of Flow Speed in the Channels of Novel Threadlike Structures on the Surfaces of Mammalian Organs, <u>Naturwissenschaften</u>, 95(2): 117-124, **2008 Feb**
- 26. Su Hong, <u>Jung Sun Yoo</u>, Ju Young Hong, Byung-Cheon Lee, Kwang-Sup Soh, Sang-Hee Lee, Youn-Joong Kim, Dae-In Kang, Byung Soo Ahn, and Hee-Jong Woo: Immunohistochemical and Electron Microscopic Study of the Meridian-like System on the Surface of Internal Organs of Rats, <u>Acupuncture & Electro-Therapeutics Research</u>, 32(3/4): 195-210, **2007**
- 27. <u>Jung Sun Yoo</u>, Min Su Kim, Baeckkyoung Sung, Byung-Cheon Lee, Kwang-Sup Soh, Sang-Hee Lee, Youn-Joong Kim, and Harald Dobberstein: Cribriform Structure with Channels in the Acupuncture Meridian-like System on the Organ Surfaces of Rabbits, <u>Acupuncture & Electro-Therapeutics Research</u>, 32(1/2): 130-132, **2007**
- 28. Jung Sun Yoo, Hyeon-Min Johng, Tae-Jong Yoon, Hak-Soo Shin, Byung-Cheon Lee, Changhoon Lee, Byung Soo Ahn, Dae-In Kang, Jin-Kyu Lee, and Kwang-Sup Soh: *In Vivo* Fluorescence Imaging of Threadlike Tissues (Bonghan Ducts) inside Lymphatic Vessels with Nanoparticles, *Current Applied Physics*, 7(4): 342-348, 2007 May
- 29. Byung-Cheon Lee, <u>Jung Sun Yoo</u>, Vyacheslav Ogay, Ki Woo Kim, Harald Dobberstein, Kwang-Sup Soh, and Byung-Soo Chang: Electron Microscopic Study of Novel Threadlike Structures on the Surfaces of Mammalian Organs, <u>Microscopy Research and Technique</u>, 70(1): 34-43, **2007 Jan**
- 30. Hyeon-Min Johng, <u>Jung-Sun Yoo</u>, Tae-Jong Yoon, Hak-Soo Shin, Byung-Cheon Lee, Changhoon Lee, Jin-Kyu Lee, and Kwang-Sup Soh: Use of Magnetic Nanoparticles to Visualize Threadlike Structures inside Lymphatic Vessels of Rats, <u>Evidence-based Complementary and Alternative Medicine</u>, 4(1): 77-82, **2007 Mar**
- 31. Yong-Yui Han, Joon-Mo Yang, <u>Jung Sun Yoo</u>, Vyacheslav Ogay, Jung-Dae Kim, Min-Su Kim, Byung-Cheon Lee, Ku-Youn Baik, Sang-Hyun Park, and Kwang-Sup Soh: Measurement of the Optical Properties of In-vitro Organ-Surface Bonghan Corpuscles of Rats, <u>Journal of the Korean Physical Society</u>, 49(6): 2239-2246, **2006 Dec**
- 32. Changhoon Lee, <u>Jung Sun Yoo</u>, Joonhyung Kwon, Kwang-Sup Soh: Study on the flow through the organ surface Bonghan duct by using nanoparticles, <u>Journal of the Korean Society of Jungshin Science</u>, 10(2): 49-55, **2006 Dec**
- 33. Byung-Cheon Lee, <u>Jung Sun Yoo</u>, Ku Youn Baik, Ki Woo Kim, and Kwang-Sup Soh: Novel Threadlike Structures (Bonghan Ducts) inside Lymphatic Vessels of Rabbits Visualized with a Janus Green B Staining Method, <u>Anatomical Record-Advances in Integrative Anatomy and Evolutionary Biology</u>, 286B(01): 1-7, **2005 Sep**

- 34. Baeckkyoung Sung, Vyacheslav Ogay, <u>Jung Sun Yoo</u>, Hyung Suk Yu, Byung-Cheon Lee, Chan Chung, Guhung Jung, and Kwang-Sup Soh: UV-A-Induced Activation of Bonghan Granules in Motion, <u>Journal of International Society of Life Information Science</u>, 23(02): 297-301, **2005 Sep**
- 35. <u>Jung Sun Yoo</u>, Kihwan Choi, Ku Youn Baik, Doo Soo Chung, and Kwang-Sup Soh: Liquid-Phase Microextraction Method in Capillary Electrophoresis to Detect Adrenaline in Bonghan Liquid, <u>Journal of International Society of Life Information Science</u>, 23(02): 292-296, **2005 Sep**
- 36. Hak-Soo Shin, Hyeon-Min Johng, Byung-Cheon Lee, Sung-II Cho, Ku Youn Baik, <u>Jung Sun Yoo,</u> and Kwang-Sup Soh: Feulgen Reaction Study of Novel Threadlike Structures (Bonghan Ducts) on the Surface of Mammalian Organs, <u>Anatomical Record-Advances in Integrative Anatomy and Evolutionary Biology</u>, 284B(01): 35-40, **2005 May**
- 37. Byung-Cheon Lee, <u>Jung Sun Yoo</u>, Eun Sung Park, Yeo Sung Yoon, Hak-Soo Shin, and Kwang-Sup Soh: Histological features of Bonghan Corpuscles on the Surface of Rabbit Internal Organs, <u>Journal of International Society of Life Information Science</u>, 23(01): 95-99, **2005 Mar**
- 38. Hyeon-Min Johng, Hak-Soo Shin, <u>Jung Sun Yoo</u>, Byung-Cheon Lee, Ku-Youn Baik, Soyeun Kim, and Kwang-Sup Soh: Bonghan Ducts on the Surface of Rat Liver, <u>Journal of International Society of Life Information Science</u>, 22(2): 469-472, **2004 Sep**

## F. Invited Chapters in Books

- 1. <u>Jung Sun Yoo,</u> Baatartsogt Oyungerel, II Youn Han, Ji Young Kim, Choong Hwan Lee, Kang Duk Choi, Kwang-Sup Soh, Tae Young Han: Molecular Compositional Differences of the Primo and the Lymphatic Vascular Systems in Murine Melanoma Models, The Primo Vascular System: Its Role in Cancer and Regeneration, Springer New York, Ed. K. S. Soh, K. A. Kang, and D. K. Harrison, 185-191, **2012**, ISBN=9781461406006
- 2. Walter Akers, Yang Liu, Gail Sudlow, Joon Lee, <u>Jung Sun Yoo</u>, Byung-Cheon Lee, Kwang-Sup Soh, and Samuel Achilefu: Identification of Primo Vascular System in Murine Tumors and Viscera, The Primo Vascular System: Its Role in Cancer and Regeneration, Springer New York, Ed. K. S. Soh, K. A. Kang, and D. K. Harrison, 179-183, **2012**, ISBN=9781461406006

# **G. Proceedings and Conference Presentations**

- Alex Ngai Nick Wong, ZeBang He, Minfeng Yang, <u>Jung Sun Yoo\*</u>: A deep learning approach for real-time intraoperative detection of peripheral nerves, World Molecular Imaging Congress Virtual 2022 (WMIC 2022, Miami Beach Convention Center, Florida, USA), World Molecular Imaging Society, September 28-October 1, 2022 (submitted) (\*corresponding author)
- Arpan Mahanty, Inyoung Oh, Ka Wing Wan, <u>Jung Sun Yoo\*</u>: Immunofluorescence specific measurement of differentiation by Cell Profiler software: A new approach to analysis of macrophage/microglia polarization, World Molecular Imaging Congress Virtual 2022 (WMIC 2022, Miami Beach Convention Center, Florida, USA), World Molecular Imaging Society, September 28-October 1, 2022 (submitted) (\*corresponding author)
- 3. ZeBang He, Alex Nagi Nick Wong, <u>Jung Sun Yoo\*</u>: Enhanced COVID-19 CT Image Infection Segmentation by Dual-Stream Network and Auxiliary Region Attention, European Conference on Computer Vision 2022 (ECCV 2022, Israel, Hybrid meeting), Organizing Committee ECCV2022, October 23-27, 2022 (submitted) (\*corresponding author)
- 4. Chung Ting Tang, ZeBang He, Alex Nagi Nick Wong, Boom Ting Kung, Tin Kun Au Yong, Jung Sun Yoo\*: Deep Learning to Reduce Scan Time and Radiation Dose in Myocardial Perfusion Imaging SPECT, The 13<sup>th</sup> Congress of the World Federation of Nuclear Medicine and Biology (WFNMB 2022, Kyoto International Conference Center, Japan, Hybrid meeting), World Federation of Nuclear Medicine and Biology (WFNMB), September 7-11, 2022 (poster) (\*corresponding author)

- 5. <u>Jung Sun Yoo</u>, Ngai Nick Alex Wong: Surgical microscopy for peripheral nerve imaging with spectral reflectance and deep neural Networks, Focus on Microscopy 2022 Online (FoM 2022 Online), Organizing Committee FOM2022, April 10 13, 2022 (**oral**, 11 April, 2022)
- 6. Minfeng Yang, <u>Jung Sun Yoo\*</u>: Label-free multiphoton microscopy of single cell metabolism to monitor therapeutic outcome of CD47 immune checkpoint blockade in breast cancer, Focus on Microscopy 2022 Online (FoM 2022 Online), Organizing Committee FOM2022, April 10 13, 2022 (**oral**, 12 April, 2022) (\*corresponding author)
- 7. Alex Ngai Nick Wong, Martin Ho Yin Yeung, Cheong Kin Ronald Chan, Angela Zaneta Chan, Chun Yin Wong, Tsz Yan Joyce Chan, <u>Jung Sun Yoo</u>, Chi Ming Wong: Prioritization on whole-slide images of clinical gastric carcinoma biopsies through a weakly supervised and annotation-free system, International Digestive Disease Forum 2021, Institute of Digestive Disease at the Chinese University of Hong Kong, Henry Cheng International Conference Centre of The Chinese University of Hong Kong, Hong Kong & Online, September 4-5, 2021 (poster) Published Abstract: Ngai Nick Wong A, Ho Yin Yeung M, Kin Ronald Chan C, et allDDF2021-ABS-0100 Prioritization on whole-slide images of clinical gastric carcinoma biopsies through a weakly supervised and annotation-free system. Gut 2021;70:A122-A123. 2 September 2021
- 8. Minfeng Yang, <u>Jung Sun Yoo\*</u>: Label-free metabolic imaging for sensitive and robust monitoring of anti-CD47 immunotherapy response in triple negative breast cancer, World Molecular Imaging Congress Virtual 2021 (WMIC Virtual 2021), World Molecular Imaging Society, October 5-8, 2021 (**poster**) (\*corresponding author)
- 9. <u>Jung Sun Yoo\*</u>, In Young Oh, Seong-Tae Han: Terahertz Wave Irradiation Promotes Skin Regeneration and New Hair Growths, World Molecular Imaging Congress Virtual 2020 (WMIC Virtual 2020), World Molecular Imaging Society, October 7-9, 2020 (poster) (\*corresponding author)
- 10. Ngai Nick Alex Wong, <u>Jung Sun Yoo\*</u>: Intraoperative Imaging Technique to Highlight Peripheral Nerves during Cancer Surgery using Spectral Reflectance, World Molecular Imaging Congress Virtual 2020 (WMIC Virtual 2020), World Molecular Imaging Society, October 7-9, 2020 (**poster**) (\*corresponding author)
- 11. Arpan Mahanty, Inyoung Oh, Ka Wing Wan, <u>Jung Sun Yoo\*</u>: Glioblastoma Staging with Fluorescence Molecular Imaging of Macrophages/Microglia Polarization, World Molecular Imaging Congress Virtual 2020 (WMIC Virtual 2020), World Molecular Imaging Society, October 7-9, 2020 (**poster**) (\*corresponding author)
- 12. <u>Jung Sun Yoo</u>: Watching Molecular Targets with Nanomaterials in Cancer and Cardiovascular Disease for Diagnosis and Image-Guided Surgery, 2018 International Symposium on Nanobiotechnology, Biosensors and Biochips (2018 ISNBB, City University of Hong Kong, Department of Biomedical Sciences), Asian Federation of Biotechnology (AFOB), Chinese Society of Biotechnology (CSBT), City University of Hong Kong (CityU), December 13-14, 2018 (invited, December 13, 2018)
- 13. <u>Jung Sun Yoo</u>: Imaging Molecular Targets in Cancer and Cardiovascular Disease for Diagnosis and Image-Guided Surgery, 2018 International Symposium on New Frontiers in Nano-Bio-Electronic Convergence Science and Technology (ISNBE 2018, Graduate School of Convergence Science and Technology, Seoul National University, Suwon, Korea), Graduate School of Convergence Science and Technology, Seoul National University, December 3-4, 2018 (invited, December 4, 2018)
- 14. <u>Jung Sun Yoo</u>: Radionuclide Imaging (RNI) in Atherosclerosis, 21<sup>st</sup> Asia-Australasia Conference of Radiological Technologists in conjunction with 5h Asia Radiotherapy Symposium 3<sup>rd</sup> Hong Kong Radiographers and Radiation Therapists Conference (AACRT 2017, Science Park, Hong Kong), The Hong Kong College of Radiographers and Radiation Therapists (HKCRRT), The Hong Kong Radiographers' Association (HKRA), Hong Kong Association of Radiation Therapists (HKART), June 23-25, 2017 (invited, June 24, 2017)
- 15. Minsu Kang, Garam Kim, Chaedong Lee, Yuanzhe Piao, Sangeun Kim, <u>Jung Sun Yoo\*</u>: *In Vivo* Imaging of Tumor-associated Macrophages to Delineate the Margins of Glioblastoma

- using Near-infrared Fluorescent Nanoparticles, 2016 KALAS International Symposium (Hwabaek International Convention Center, Gyeongju, Korea), Korean Association for Laboratory Animal Science, August 24-26, 2016 (oral, August 25, 2016) (\*corresponding author)
- 16. Ga Ram Kim, Sang Eun Kim, <u>Jung Sun Yoo\*</u>: Intraoperative Visualization of Nerve for Surgical Guidance with No Exogenous Label using Spectral Reflectance Imaging, 2016 KALAS International Symposium (Hwabaek International Convention Center, Gyeongju, Korea), Korean Association for Laboratory Animal Science, August 24-26, 2016 (poster, August 25, 2016) (\*corresponding author), Poster Award
- 17. So Jeong Kim, Chae Dong Lee, Jae Ho Jung, Ji Young Choi, Byung Chul Lee, Yuanzhe Piao, Sang Eun Kim, <u>Jung Sun Yoo\*</u>: *In Vivo* Fluorescence Imaging of Glioblastoma using Translocator Proteins (TSPOs) Targeted Nanoparticles, 2016 KALAS International Symposium (Hwabaek International Convention Center, Gyeongju, Korea), Korean Association for Laboratory Animal Science, August 24-26, 2016 (**poster**, August 25, 2016) (\*corresponding author)
- 18. Wan Kim, So Jeong Kim, Sang Eun Kim, <u>Jung Sun Yoo\*</u>: Semi-Automated Image Analysis Technique for Quantifying Cellular Expression of Mitochondrial Translocator Protein (TSPO) Targeting Nanoparticles using Free Open-Source Software, , 2016 KALAS International Symposium (Hwabaek International Convention Center, Gyeongju, Korea), Korean Association for Laboratory Animal Science, August 24-26, 2016 (poster, August 25, 2016) (\*corresponding author)
- 19. Anna Go, Minsu Kang, Sojeong Kim, <u>Jung Sun Yoo</u>, Tae-Rin Lee: Prediction of Blood Flow *In Vivo* using Bifurcated Microfluidic Channels, The Korean Society of Mechanical Engineers 2016 Spring Conference Bioengineering Division (Kangwon National University, Kangwon-Do, Korea), The Korean Society of Mechanical Engineers, April 27-29, 2016 (oral, April 29, 2016)
- 20. <u>Jung Sun Yoo</u>, Juhwan Yoon, Sang Eun Kim, Seong-Tae Han: Terahertz Wave Irradiation enhances Proliferation of Hair Follicle Stem Cells, 2015 International Symposium on New Frontiers in Nano-Bio Convergence Technology (ISNB 2015, Graduate School of Convergence Science and Technology, Seoul National University, Suwon, Korea), Graduate School of Convergence Science and Technology, Seoul National University, December 17-18, 2015 (oral, December 18, 2015)
- 21. Chaedong Lee, Joohwan Yoon, Bokyung Seo, <u>Jung Sun Yoo</u>, Yuanzhe Piao: Tumorassociated macrophage imaging using bimodal nanoparticles for delineating margins of glioblastoma, (ISNB 2015, Graduate School of Convergence Science and Technology, Seoul National University, Suwon, Korea), Graduate School of Convergence Science and Technology, Seoul National University, December 17-18, 2015 (oral, December 18, 2015)
- 22. <u>Jung Sun Yoo</u>, Chaedong Lee, Juhwan Yoon, Yuanzhe Piao, Sang Eun Kim: Tumorassociated Macrophage Imaging to Delineate the Margins of Glioblastoma using Near-infrared Fluorescent Nanoparticles, 11<sup>th</sup> Asia Oceania Congress of Nuclear Medicine and Biology (AOCNMB2015, International Convention Center Jeju, Jeju, Korea), Asia and Oceania Federation of Nuclear Medicine and Biology, October 31-November 4, 2015 (**oral**, November 3, 2015)
- 23. <u>Jung Sun Yoo,</u> Chaedong Lee, Juhwan Yoon, Jae Ho Jung, Byung Chul Lee, Yuanzhe Piao, Sang Eun Kim: Tumor-associated Macrophage Imaging to Delineate the Margins of Glioblastoma using a Triple-modality PET-MRI-fluorescent Nanoparticle, <u>World Molecular Imaging Congress 2015 Precision Medicine...Visualized</u> (WMIC 2015, Hawaii Convention Center, Honolulu, Hawaii, USA), World Molecular Imaging Society, September 2-5, 2015 (poster, September 4, 2015)
- 24. Seong-Tae Han, Woo-Jae Lee, Ki-Sang Park, Sung-Wook Choi, Juhwan Yoon, <u>Jung Sun Yoo</u>: Application of T-Ray Gyrotron Developed for Real-Time Non-Destructive Inspection to Enhanced Regeneration of Cells, <u>IRMMW-THz2015</u> (The 40<sup>th</sup> International Conference on Infrared, Millimeter, and Terahertz Waves, The Chinese University of Hong Kong, Hong Kong),

- The International Society of Infrared, Millimeter, and Terahertz Waves, August 23-28, 2015 (**oral**, August 24, 2015) Published as Proceedings Paper in the Book Series of "International Conference on Infrared Millimeter and Terahertz Waves"
- 25. <u>Jung Sun Yoo</u>, Sue Yeon Lim, Juhwan Yoon, Sang Eun Kim, Won Woo Lee: CCR2 Targeted Fluorescent Peptides Highlight Inflammation in Myocardial Infarction, <u>2015 International Symposium on New Frontiers in Nano-Bio-Energy Convergence Science and Technology</u> (ISNBE 2015, Yangzhou University, Yangzhou, China), College of Chemistry and Chemical Engineering, Yangzhou University, July 24-25, 2015 (invited, July 25, 2015)
- 26. <u>Jung Sun Yoo</u>, Juhwan Yoon, Seong-Tae Han: Terahertz Wave Irradiation Contributes to Proliferation of Hair Follicle Stem Cells, <u>Korea Physical Society 2015 Spring Conference</u> (Daejeon Convention Center, Daejeon, Korea), The Korean Physical Society, April 22-24, 2015 (oral)
- 27. <u>Jung Sun Yoo</u>, Young-Tae Chang, Sang Eun Kim: Intraoperative Lymph Node Staging using a Macrophage-Specific Fluorescent Probe, <u>Imaging in 2020 Imaging the Immune System</u> (Jackson Hole, WY, USA), World Molecular Imaging Society, September 21-25, 2014 (**poster**)
- 28. Jung Sun Yoo, Young-Tae Chang, Byung Chul Lee, Sang Eun Kim: A Fluorescent Dye for In Vivo Labeling of Alveolar Progenitors and Type II Cells, World Molecular Imaging Congress 2014 (WMIC 2014, COEX Convention Center, Seoul, Korea), World Molecular Imaging Society, September 17-20, 2014 (poster)
- 29. <u>Jung Sun Yoo</u>, Chaedong Lee, Byung Chul Lee, Yuanzhe Piao, Sang Eun Kim: Fluorescent Nanoparticles for *In Vivo* Imaging of Tumour Metastasis and Tumour-associated Macrophages, <u>2014 International Symposium on New Frontiers in Nano-Bio-Energy Convergence Science and Technology</u> (ISNBE 2014, Graduate School of Science and Technology, Seoul National University, Suwon, Korea), Graduate School of Convergence Science and Technology, Seoul National University, August 12-13, 2014 (**oral**)
- 30. <u>Jung Sun Yoo,</u> Young-Tae Chang, Byung Chul Lee, Sang Eun Kim: Fluorescence Imaging for *In Vivo* Biology and Clinical Applications, <u>Korea Physical Society 2014 Spring Conference</u> (Daejeon Convention Center, Daejeon, Korea), The Korean Physical Society, April 23-25, 2014 (oral)
- 31. <u>Jung Sun Yoo</u>: Fluorescence Imaging for *In Vivo* Biology and Clinical Applications, <u>4th Conference on Pioneering Convergence Technologies</u> (Graduate School of Science and Technology, Seoul National University, Suwon, Korea), Graduate School of Science and Technology, Seoul National University, January 23, 2014 (**oral**)
- 32. <u>Jung Sun Yoo</u>, Sung-Chan Lee, Zhi Yen Jow, Yun Xian Koh, Young-Tae Chang: A macrophage-specific Fluorescent Probe Distinguishes Metastatic and Inflamed Lymph Nodes *In Vivo*, <u>Korea Physical Society 2013 Spring Conference</u> (Daejeon Convention Center, Daejeon, Korea), The Korean Physical Society, April 24-26, 2013 (oral)
- 33. <u>Jung Sun Yoo</u>, M. Hossein Ayati, Wei-bo Zhang, Hong Ryul Park, Young-Guen Kwon, Kwang-Sup Soh: Compositional Differences of Primo-, Blood, and Lymphatic Vascular System in Lung Cancer Xenograft, <u>International Symposium on Primo-Vascular System Special Topics on Cancer, Regeneration, and Acupuncture</u> (ISPS2010, Cheongpung Resort-Lake Hotel, Jecheon, Korea), 2010 World Oriental Medicine-Bio EXPO in Jecheon, Korea & College of Natural Sciences, Seoul National University, September 17-18, 2010 (**poster**)
- 34. <u>Jung Sun Yoo,</u> Hong Bae Kim, Nayoun Won, Jiwon Bang, Sungjee Kim, Saeyoung Ahn, and Kwang-Sup Soh: *In Vivo* Imaging of Cancer Cells in the Primo-vascular System with Electroporation of Quantum Dots and Multispectral Imaging, <u>Korea Physical Society 2009 Spring Conference</u> (Changwon Exhibition Convention Center, Changwon, Korea), The Korean Physical Society, October 21-23, 2009 (**oral**)
- 35. <u>Jung Sun Yoo,</u> Hong Bae Kim, Vyacheslav Ogay, Byung-Cheon Lee, Saeyoung Ahn, and Kwang-Sup Soh: Bonghan Ducts as Possible Pathways for Cancer Metastasis, <u>The 5<sup>th</sup> SAMS 2009 Symposium on Acupuncture and Meridian Studies</u> Traditional and holistic medicine: The past, present and future (SETEC convention center, Seoul, Korea), International Pharmacopuncture Institute, October 9-11, 2009 (**oral**)

- 36. <u>Jung Sun Yoo</u>, Ku-Youn Baik, Kwang-Sup Soh: Application of Fluorescent Magnetic Nanoparticles in Bonghan System Study, <u>Asian Magnetics Conference 2008 & KMS Winter Conference</u> (Paradise Hotel, Busan, Korea), The Korean Magnestics Society, December 10-13, 2008 (oral)
- 37. Baeckkyoung Sung, Min Su Kim, <u>Jung Sun Yoo</u>, Byung-Cheon Lee, Sang-Hee Lee, Youn-Joong Kim, Ki-Won Kim, and Kwang-Sup Soh: Liquid Flow in the Channels of the Novel Threadlike Structures on the Surfaces of Mammalian Organs and its Electron Microscopic Analysis, <u>Korean Society of Microscopy 2006 Fall Conference</u> (The Catholic University of Korea, Seoul, Korea), Korean Society of Microscopy, November 9, 2006 (**oral**)
- 38. <u>Jung Sun Yoo</u>, Min Su Kim, Baeckkyoung Sung, Byung-Cheon Lee, Kwang-Sup Soh, Sang-Hee Lee, Youn-Joong Kim, and Harald Dobberstein: Cribriform Structure with Channels in the Acupuncture Meridian-like System on the Organ Surfaces of Rabbits, <u>22nd Annual International Symposium on Acupuncture & Electro-Therapeutics & Bi-Digital O-ring Test</u> (Columbia University, New York City, USA), The International College of Acupuncture & Electro-Therapeutics, November 4-7, 2006 (**oral**)
- 39. <u>Jung Sun Yoo</u>, Min Su Kim, Vyacheslav Ogay, Kwang-Sup Soh: Alcian Blue Staining Method for Visualizing Bonghan Ducts inside Blood Vessels of Mice, <u>WC 2006 World Congress on Medical Physics and Biomedical Engineering</u> (COEX, Seoul, Korea), IFMBE Proceedings book series (IFMBE, volume 14, pp 3626-3629), International Federation of Medical and Biological Engineering (IFMBE), International Organization for Medical Physics (IOMP), August 27 September 1, 2006 (**poster**)
- 40. Byung-Cheon Lee, <u>Jung Sun Yoo</u>, Ku Yuen Baik, Eun-sung Park, Yeo-Sung Yoon, Kwang-Sup Soh: Hidden Corpuscular Structures Floating Inside Blood Vessels of Mammalians, <u>WC 2006 World Congress on Medical Physics and Biomedical Engineering</u> (COEX, Seoul, Korea), IFMBE Proceedings book series (IFMBE, volume 14, pp 3598-3601), International Federation of Medical and Biological Engineering (IFMBE), International Organization for Medical Physics (IOMP), August 27 September 1, 2006 (**oral**)
- 41. Hyeon-Min Johng, Chang-Hoon Lee, <u>Jung Sun Yoo</u>, Tae-Jong Yoon, Hak-Soo Shin, Byung-Cheon Lee, Jin-Kyu Lee, Jung Dae Kim, Wan Su Park, Kwang-Sup Soh: Nanoparticles for Tracing Acupuncture Meridians and Bonghan Ducts, <u>WC 2006 World Congress on Medical Physics and Biomedical Engineering</u> (COEX, Seoul, Korea), IFMBE Proceedings book series (IFMBE, volume 14, pp 3584-3586), International Federation of Medical and Biological Engineering (IFMBE), International Organization for Medical Physics (IOMP), August 27 September 1, 2006 (**poster**)
- 42. <u>Jung Sun Yoo</u>, Min Su Kim, Vyacheslav Ogay, and Kwang-Sup Soh: Alcian Blue Staining Method for Visualizing Bonghan Ducts inside Blood Vessels of Mice, <u>Frontiers in Biophysics and Nano-biotechnology</u>, organized by the Biophysics Division, the Cavendish-KAIST Cooperative Research Program (Hoam convention center, Seoul National University, Seoul, Korea), June 22 23, 2006 (**poster**)
- 43. <u>Jung Sun Yoo</u>, Byung-Soo Chang, Vyacheslay Ogay, Byung-Cheon Lee, Sang-Hee Lee, Youn-Joong Kim, and Kwang-Sup Soh: Study on the Ultrastructure of Bonghan Duct with Electron Microscopy, <u>Korean Society of Microscopy 2006 Spring Conference</u> (Hoam convention center, Seoul National University, Seoul, Korea), Korean Society of Microscopy, May 25-26, 2006 (oral)
- 44. <u>Jung Sun Yoo</u>, Hyeon-Min Johng, Tae-Jong Yoon, Hak-Soo Shin, Byung-Cheon Lee, Changhoon Lee, Jin-Kyu Lee and Kwang-Sup Soh: Visualizing Bonghan Ducts inside Lymphatic Vessels using Nanoparticles, IW-NSI 2006 <u>The 2<sup>nd</sup> international workshop of NANO systems institute</u> (Hoam convention center, Seoul National University, Seoul, Korea), NANO systems institute of the Seoul National University, May 8-10, 2006 (**poster**)
- 45. <u>Jung Sun Yoo</u>, Vyacheslav Ogay, Byung-Cheon Lee and Kwang-Sup Soh: Three-Dimensional Reconstruction of a New Threadlike Tissue with High-Voltage Electron Microscope Tomography, <u>Korea Physical Society 2006 Fall Conference</u> (Phoenix Park, Pyeong Chang, Gangwon-do, Korea), The Korean Physical Society, April 20-21, 2006

#### (poster)

- 46. Ju Young Hong, Su Hong, Byung-Cheon Lee, <u>Jung Sun Yoo</u>, and Kwang-Sup Soh: Identification and Isolation of the Pluripotent Stem Cells from the Bonghan Corpuscle, The FASEB Journal, 20: A884, 2006, <u>Experimental Biology 2006 Meeting</u> (Moscone Convention Center, San Francisco, California, USA), Federation of American Societies for Experimental Biology, April 1-5, 2006 (**poster**)
- 47. Kwang-Sup Soh, Su Hong, Ju-Young Hong, Byung-Cheon Lee, <u>Jung Sun Yoo</u>: Immunohistochemical Characterization of Intravascular Bonghan Duct, Microcirculation, 13: 166, <u>Developmental Vascular Biology Workshop Ⅱ</u> Abstracts (Asilomar Conference Grounds, Pacific Grove, California), The North American Vascular Biology Organization, February 1-5, 2006 (**poster**)
- 48. <u>Jung Sun Yoo</u>, Kihwan Choi, Ku Youn Baik, Doo Soo Chung and Kwang-Sup Soh: Liquid-Phase Microextraction Method in Capillary Electrophoresis to Detect Adrenaline in Bonghan Liquid, <u>The 20<sup>th</sup> Symposium on Life Information Science Program</u> (Tokyo Institute of Technology, Tokyo, Japan), International Society of Life Information Science (ISLIS), September 2-4, 2005 (**oral**)
- 49. Byung-Cheon Lee, <u>Jung Sun Yoo</u>, Sungkwang Kim, Kwang-Sup Soh: Meditation and Plant-like Bundle Structure of Bonghan Duct, <u>The 23th Symposium of the Korean Society of Jungshin Science, Proceedings of Korean Jungshin Science Symposium 23, 2005, 10, 135-140</u> (Korea Military Academy, Seoul, Korea), October 28-29, 2005 (**oral**)
- 50. Changhoon Lee, <u>Jung Sun Yoo</u>, Hyung Hwan Kim, Joonhyung Kwon, Kwang-Sup Soh: Flow of Nanoparticles inside Organ-surface Bonghan Ducts, <u>The 23th Symposium of the Korean Society of Jungshin Science</u>, <u>Proceedings of Korean Jungshin Science Symposium 23, 2005, 10, 129-134</u> (Korea Military Academy, Seoul, Korea), October 28-29, 2005 (**oral**)
- 51. Jung Sun Yoo, Kihwan Choi, Doo Soo Chung and Kwang-Sup Soh: Identification of Adrenaline in Bonghan Liquid by Liquid-Phase Microextraction Method of Capillary Electrophoresis, The 13th International Conference of Women Engineers and Scientists (Ewha Womans University, Seoul, Korea), International Network of Women Engineers and Scientists (INWES), August 26-29, 2005 (poster)
- 52. Byung-Cheon Lee, <u>Jung Sun Yoo</u>, Eun Sung Park, Yeo Sung Yoon, Hak-Soo Shin and Kwang-Sup Soh: Histological features of Bonghan Corpuscles on the Surface of Rabbit Internal Organs, <u>The 19th Symposium on Life Information Science Program</u> (Tokyo Denki University, Tokyo, Japan), International Society of Life Information Science (ISLIS), February 26-27, 2005 (oral)
- 53. Byung-Cheon Lee, <u>Jung Sun Yoo</u>, Eun Sung Park, Ku Youn Baik, Jung-Dae Kim, Ki Woo Kim, Yeo Sung Yoon, Kwang-Sup Soh: Histological Studies on Threadlike and Corpuscular Structures on the Surfaces of Rat and Rabbit Internal Organs, <u>Korean Association of Veterinary Anatomists</u> (Kangwon National University, Chuncheon, Korea), February 24, 2005 (poster)

#### H. Invited Seminars

- 1. Biomedical Research using Optical Molecular Imaging, Department of Food Science and Biotechnology, <u>Gachon University</u>, Seongnam, Gyeonggi-do, Korea, Jul 26, 2016
- 2. Optical Molecular Imaging Can Change the Future of Medicne, Department of Physics Education, Seoul National University, Seoul, Korea, Nov 19, 2015
- 3. Watching Molecular Targets in Living Bodies: the Cutting Edge in Clinical Medicine, Seminar Speaker, Department Colloquium, Department of Physics, <u>Sungkyunkwan University</u>, Suwon, Gyeonggi-do, Korea, Sep 16, 2015
- 4. Imaging Inflammation with Nanomaterials in Cancer and Cardiovascular Disease, Seminar Speaker, The 18<sup>th</sup> Convergence Research Forum, <u>Advanced Institutes of Convergence</u> Technology, Seoul National University, Suwon, Gyeonggi-do, Korea, May 27, 2015
- 5. In Vivo Fluorescence Imaging of Glioblastoma with Water Well-dispersed Iron Oxide

- Nanoparticles, Seminar Speaker, Nanoparticle Innovation Research Center, <u>Advanced Institutes of Convergence Technology</u>, Seoul National University, Suwon, Gyeonggi-do, Korea, Dec 23, 2014
- 6. Fluorescence Imaging for *In Vivo* Biology and Image-guided Surgery, Seminar Speaker, Department of Nuclear Medicine, <u>Seoul National University Bundang Hospital</u>, Bundang, Gyeonggi-do, Korea, May 7, 2014
- 7. Fluorescence Imaging of Live Animals with Nanomaterials, Seminar Speaker, Nanoparticle Innovation Research Center, <u>Advanced Institutes of Convergence Technology</u>, Seoul National University, Suwon, Gyeonggi-do, Korea, Apr 14, 2014
- 8. Fluorescence-guided Surgery using Multispectral Imaging System, Seminar Speaker, Biomedical Engineering Branch, <u>National Cancer Center</u>, Goyang, Gyeonggi-do, Korea, Apr 10, 2014
- 9. *In Vivo* Biology and Image-guided Surgery using Fluorescence, Seminar Speaker, <u>Graduate School of Convergence Science and Technology, Seoul National University</u>, Suwon, Gyeonggi-do, Korea, Apr 9, 2014
- 10. Fluorescence Imaging for *In Vivo* Biology and Image-guided Surgery, Seminar Speaker, Seoul National University College of Medicine, Seoul, Korea, Apr 1, 2014
- 11. Fluorescence Imaging for *In Vivo* Biology and Clinical Applications, Seminar Speaker, Center for Neuroscience Imaging Research, Institute for Basic Science, <u>Sungkyunkwan University</u>, Suwon, Gyeonggi-do, Korea, Mar 21, 2014
- 12. Fluorescence Imaging for *In Vivo* Biology and Clinical Applications, Seminar Speaker, Molecular Imaging & Therapy Branch, Division of Convergence Technology, <u>National Cancer</u> Center, Goyang, Gyeonggi-do, Korea, Mar 7, 2014
- 13. A Macrophage-Specific Fluorescent Probe Distinguishes Metastatic And Inflamed Lymph Nodes *In Vivo*, Seminar Speaker, Plasma Bioscience Research Center, <u>Kwangwoon University</u>, Seoul, Korea, Apr 30, 2013
- 14. Monocyte/Macrophage Specific Fluorescent Probe Development to Assess inflammation *In Vivo*, Seminar Speaker, Advanced Institutes of Convergence Technology, <u>Seoul National University</u>, Suwon, Gyeonggi-do, Korea, Apr 9, 2012
- 15. Monocyte/Macrophage Specific Fluorescent Probe Development to Assess inflammation *In Vivo*, Seminar Speaker, Molecular Imaging & Therapy Branch, Division of Convergence Technology, National Cancer Center, Goyang, Gyeonggi-do, Korea, Apr 10, 2012
- 16. Evidence for an Additional Metastatic Route: *In Vivo* Imaging of Cancer Cells in the Primovascular System, Seminar Speaker, Kathy E. Holden Auditorium, Farrell Learning and Teaching Center, Optical Radiology Lab Seminar, Department of Raiology, School of Medicine, Washington University in St. Louis, Saint Louis, MO, USA, May 7, 2010.
- 17. In Vivo Tracking of Cancer Cells in Primo-vessels (Bonghan Ducts) using Multispectral Fluorescence Imaging System, Seminar Speaker, Department of Biological Science, Sungkyunkwan University, Suwon, Gyeonggi-do, Korea, Sep 10, 2009.
- 18. Fluorescence Imaging in Living Tissues using Various Correction Methods, Seminar Speaker, Molecular Imaging & Therapy Branch, Division of Convergence Technology, <u>National Cancer Center</u>, Goyang, Gyeonggi-do, Korea, Apr 2, 2008

#### I. Patents

- Ho Yin Martin Yeung, Ngai Nick Alex Wong, <u>Jung Sun Yoo</u>, Cheong Kin Ronald Chan, Ka Fai To, Systems, Methods and Workflow for Processing Whole Slide Imaging for Disease Detection: The Hong Kong Polytechnic University, The Chinese University of Hong Kong, Application #63/366,019, June 08, 2022, US Provisional Patent Application
- 2. <u>Jung Sun Yoo</u>, Ngai Nick Alex Wong, An Intraoperative Imaging Technique to Specifically Visualize Peripheral Nerves using Spectral Reflectance and Deep Neural Networks: The Hong Kong Polytechnic University, Application # 63/265,158, December 09, 2021, US

- **Provisional Patent Application**
- 3. Tae-Rin Lee, <u>Jung Sun Yoo</u>, System and Method for Quantifying Cell and/or Drug Transfer Efficiently In Microvessel And Surrounding Tissue: Advanced Institutes of Convergence Technology: Application # PCT/KR2017/008951, Grant # WO 2018/034507/A1, February 22, 2018, PCT patent
- 4. Tae-Rin Lee, <u>Jung Sun Yoo</u>, System and Method for Quantitatively Estimating Delivering Efficiency of Cells and/or Drugs in Microvessels and Tissue: Advanced Institutes of Convergence Technology: KR Patent 10-1909447, Oct. 12, 2018, Republic of Korea
- 5. Jung Sun Yoo, Tae-Rin Lee, Non-label Imaging System for Selective Microscopy of Peripheral Nerve: Seoul National University R&DB Foundation, Advanced Institutes of Convergence Technology. Application # PCT/KR2017/001823 (Feb. 20, 2017), Grant # WO 2017/142376 A1, August 24, 2017, PCT patent
- 6. <u>Jung Sun Yoo</u>, Tae-Rin Lee, Label-free Imaging System for Specific Detection of Peripheral Nerve: Seoul National University R&DB Foundation, Advanced Institutes of Convergence Technology: KR Patent 10-1790988, Oct. 26, 2017, Republic of Korea
- 7. Seong-Tae Han, <u>Jung Sun Yoo</u>, Device for Stimulating the Growth of Hair and Skin Tissue: Korea Electrotechnology Research Institute: KR Patent 10-1773983, Aug. 28, 2017, Republic of Korea
- 8. Kwang-Sup Soh, <u>Jung Sun Yoo</u>, Jaekwan Lim, A Method for Imaging Metastasis of Cancer via Primo-vessel: Seoul National University R&DB Foundation, Mobase Co., Ltd: KR Patent 10-1218798, Dec. 28, 2012, Republic of Korea
- 9. Kwang-Sup Soh, Byung-Cheon Lee, <u>Jung Sun Yoo</u>, Ku-Youn Baik, Sung-Il Cho, Visualizing Agent Comprising a Janus Green B and Visualizing Method by using the Same: Seoul National University R&DB Foundation: KR Patent 10-0950246, Mar. 23, 2010, Republic of Korea, US Patent US20090155171A1, 18 June 2009, United States
- 10. Kwang-Sup Soh, Hyeon-Min Johng, Hak-Soo Shin, Chunho Choi, <u>Jung Sun Yoo</u>, Young-Zoon Yoon, Changhoon Lee, Sung-II Cho, Visualizing Agent Comprising a Magnetic Nanoparticle and Visualizing Method by using the Same: Seoul National University R&DB Foundation: KR Patent 10-0875989, Dec. 18, 2008, Republic of Korea
- 11. Kwang-Sup Soh, Byung-Cheon Lee, <u>Jung Sun Yoo</u>, Changhoon Lee, Hyeon-Min Johng, Min Su Kim, Visualizing Method by using the Alcian Blue: Seoul National University R&DB Foundation, Mobase Co., Ltd: KR Patent 10-0753899, Aug. 24, 2007, Republic of Korea

# J. Research Support

#### **Ongoing Research Support**

1. 15101422 Kai Hei Tse (PI), 01/01/2023-12/31/2025

General Research Fund (GRF), Research Grants Council of Hong Kong (RGC), HKD 1,177,736

Dysregulation of Autophagy by Tripartite Motif (TRIM) Family Proteins at the Blood Brain Barrer – A Novel Cellular Mechanism Towards White Matter Hyperintensity

Role: Co-Investigator

Externally competitive and peer-reviewed

2. C5078-21E, Mo Yang (PC) 30/06/2022-29/06/2025

Collaborative Research Equipment Grant (CRF), Research Grants Council of Hong Kong (RGC), HKD 7,820,000

An Upright Multiphoton Microscope for Intravital Imaging and Optogenetic Studies

Role: Co-Principal Investigator

Externally competitive and peer-reviewed

3. P0039715 Jung Sun Yoo (PI) 02/02/2022-08/01/2023

Departmental General Research Fund, The Hong Kong Polytechnic University, HKD 100,000 Label-free Multiparametric Metabolic Imaging for Sensitive and Robust Monitoring of Immunotherapy Response: A Pilot Study.

Role: Principal Investigator Internal Research Fund

4. P0041343 Yun Chung Leung (PI) 04/29/2022-04/30/2023

Large Equipment Fund, The Hong Kong Polytechnic University, HKD 3,500,000

A Multi-Parameter Flow Analyzer

Role: Co-Investigator
Internal Research Fund

5. P0040893 Yun Chung Leung (PI) 04/03/2022-03/03/2023

Large Equipment Fund, The Hong Kong Polytechnic University, HKD 25,000,000

Animal MRI System and Animal Imaging Equipment in Animal Imaging Centre

Role: Co-Investigator
Internal Research Fund

6. 15107118 Jung Sun Yoo (PI) 01/01/2019-06/30/2022

General Research Fund (GRF), Research Grants Council of Hong Kong (RGC), HKD 899,100

Terahertz Wave Irradiation Promotes Skin Regeneration and New Hair Growths

The goal of this project to investigate the effect of Terahertz wave irradiation to promote skin regeneration and new hair growths via inflammatory activation.

Role: Principal Investigator

Externally competitive and peer-reviewed

7. P0036791 (Funding Body Ref. No. LEF2021-034) Tin Cheung Ying (PI) 06/15/2021-06/30/2022

Large Equipment Fund, The Hong Kong Polytechnic University, HKD 990,000

Sophisticated Imaging and Advanced Intelligent Ultrasound System (HTI-2)

Role: Co-Investigator

Internal Research Fund

8. P0036791 (Funding Body Ref. No. LEF2021-037) Liang-ting Lin (PI) 06/15/2021-06/30/2022 Large Equipment Fund, The Hong Kong Polytechnic University, HKD 852,420

The Analytical Bundled Equipment for Radioisotope Qualitative and Quantitative Measurement (HTI-5)

Role: Co-Investigator

Internal Research Fund

#### **Pending Funding Application**

1. Jung Sun Yoo (PI) 01/01/2023-12/31/2025

Health and Medical Research Fund (HMRF), Food and Health Bureau (FHB), HKD 1,500,000 Early and Accurate Monitoring of Immunotherapy Response by Artificial Intelligence-Assisted Multimodal Metabolic Imaging

Role: Principal Investigator

Externally competitive and peer-reviewed

2. Kenneth King-yip Cheng (PI)

Guangdong-Hong Kong Technology Cooperation Funding Scheme (TCFS)

Platform Construction of Metabolism-based Immunotherapy Development and Efficacy Evaluation for Glioma

Role: Co-Investigator

Externally competitive and peer-reviewed

## **Completed Research Support**

1. P0035228 Jung Sun Yoo (PI) 02/01/2021-04/30/2022

Departmental General Research Fund, The Hong Kong Polytechnic University, HKD 100,000 Quantitative In Vivo Imaging Technique to Measure a Ratio of Antitumor-to-protumor Macrophages and Microglia to Predict Anti-PD-1 Immunotherapy Efficacy in Glioblastoma: A Pilot Study.

Role: Principal Investigator Internal Research Fund

### 2. 25104017 Jung Sun Yoo (PI) 01/01/18-06/30/21

Early Career Scheme (ECS), Research Grants Council of Hong Kong (RGC), <u>HKD 1,248,632</u> Intraoperative Imaging System to Highlight Peripheral Nerves using Polarized Spectral Reflectance

The goal of this project is to develop specific surgical imaging system for detection of peripheral nerve based on specific optical properties including polarization and spectral reflectance.

Role: Principal Investigator

Externally competitive and peer-reviewed

#### 3. 2014R1A2A1A11053420 Jung Sun Yoo (PI) 11/01/14-10/31/16

Mid-Career Researcher Program, National Research Foundation of Korea (NRF), Ministry of Science, ICT and Future Planning (MSIP, Korea) <u>KRW 200,000,000</u>

Development of Spectral Reflectance Imaging System for Label-Free Intraoperative Imaging of Peripheral Nerves

The goal of this project is to develop specific imaging system for peripheral nerve to provide intraoperative guidance for minimally invasive surgery.

Role: Principal Investigator

Externally competitive and peer-reviewed

#### 4. AICT-20150013 Tae-Rin Lee (PI) 09/22/15-12/31/15

Advanced Institutes of Convergence Technology (Korea) KRW 15,000,000

Nanomedicine Design using High-Resolution Bioimaging and Simulation

This project finds the optimized design of nanomedicine for targeted therapy of malignant cancer by using high-resolution intravital imaging and computational modeling.

Role: Co-Investigator (Stake – KRW 7,500,000)

Internally competitive and peer-reviewed

## 5. **Jung Sun Yoo (PI)** 06/01/15-11/31/15

Sejong Science High School R&E Program, Korea Foundation for the Advancement of Science & Creativity (KOFAC, Korea) KRW 4,800,000

Skin Regeneration using Terahertz Wave

The goal of this project is to investigate the effect of terahertz wave on skin regeneration and hair follicle stem cell proliferation.

Role: Principal Investigator

Externally competitive and peer-reviewed

## 6. 13-2015-013 Byung Chul Lee (PI), Jung Sun Yoo (Co-PI) 04/01/15-03/31/16

SNUBH Research Fund, Seoul National University Bundang Hospital (SNUBH, Korea) KRW 30,000,000

Development of PET-MRI-Optical Imaging Technique using Water Well-dispersed Iron Oxide Nanoparticle for Tumor Diagnosis and Intraoperative Guidance

The goal of this project is to develop triple modality imaging technique using a PET-MRI-fluorescent nanoparticle with high water solubility for preoperative diagnosis and intraoperative guidance of glioblastoma.

Role: Co-Principal Investigator

Internally competitive and peer-reviewed

## 7. SSCC/10/024 Young-Tae Chang (PI), Bing Lim (Co-PI) 11/01/10-10/31/13

Singapore Stem Cell Consortium Grant Call 2010, A\*STAR Singapore Stem Cell Consortium (SSCC, Singapore) SGD 984,000

Development of Novel Chemical Compounds for Directing Human ES Cell Differentiation to Lineages of Respiratory Airways

This project developed specific fluorescent probes for human ES derived cells to lung cells and functional chemicals for enhancing human ES differentiation.

Role: Co-Investigator

## Externally competitive and peer-reviewed

8. Kwang-Sup Soh (PI) 07/05/10-12/31/10

Ministry of Health & Welfare (MOHW, Korea) KRW 49,300,000

Visualization of Bonghan System using Nanotechnology and Endoscope Development The goal of this project was to visualize Bonghan system using nanotechnology and endoscope development.

Role: Co-Investigator

Contract research

9. Kwang-Sup Soh (PI) 07/01/10-11/30/10

Korea Institute of Oriental Medicine (Korea) KRW 30,000,000

Comparison of Characteristics of Lymphatic and Primo Vessel in Tumor Tissue

This project analyzed histological characteristics of lymphatic and promo vessels in tumor tissue.

Role: Co-Investigator

Contract research

10. Kwang-Sup Soh (PI) 06/01/09-12/31/09

Korea Institute of Oriental Medicine (Korea) KRW 62,000,000

Measurement of Membrane Potential and Action Potential of Bonghan System Consisting Cells and it's Analysis with Nonlinear theory

The goal of this project was to measure membrane potential and action potential of Bonghan system consisting cells in order to compare with nerve tissue and blood and lymphatic vessels.

Role: Co-Investigator

Contract research

11.20090435361-00 Kwang-Sup Soh (PI) 04/21/09-02/19/10

Ministry of Health & Welfare (MOHW, Korea) KRW 98,000,000

The Development of a Vision Device for the Bonghan System Observation

This study developed a prototype of endoscopic imaging system to visualize microanatomical structures representing acupuncture meridian (Bonghan system).

Role: Co-Investigator

Contract research

12. Kwang-Sup Soh (PI) 09/01/08-08/31/10

Mobase, Inc. (Korea) KRW 160,000,000

Research on Imaging and Tracing of Bonghan System

The goal of this project was to image anatomical network and show fluid-conducting function of acupuncture meridian using fluorescence molecular imaging technique. The goal of this project was to develop a new animal imaging system for intra-operative guidance using multispectral techniques.

Role: Co-Investigator

Contract research

13. KRF-612-2007-1-C00046 Jung Sun Yoo (PI) 08/01/07-03/31/08

Basic Research Promotion Fund, National Research Foundation of Korea (NRF), Ministry of Education (MOE, Korea) KRW 19,000,000

Development of Intra-operative Fluorescence Imaging System for Small Animals

The goal of this project was to develop a new animal imaging system for intra-operative guidance using multispectral techniques.

Role: Principal Investigator

Externally competitive and peer-reviewed

14. Kwang-Sup Soh (PI) 09/01/05-08/30/08

Mobase, Inc. (Korea) KRW 240,000,000

Research on the Relation between Stem Cells and Bonghan Systems

The goal of this project was to find and analyze stem cells inside Bonghan systems.

Role: Co-Investigator

Contract research

#### 15. M604EA020005-04E0102-00510 Kwang-Sup Soh (PI) 07/01/04-06/30/07

Global R&D Networking Program, National Research Foundation of Korea (NRF), Ministry of Education (MOE, Korea), Ministry of Science, ICT and Future Planning (MSIP, Korea) KRW 900,000,000

Cavendish-KAIST Cooperative Research Project-Biophysics Division

The goal of this project was to reveal ultrastructure and analyze motion of small cells in the acupuncture meridian system.

Role: Co-Investigator

Externally competitive and peer-reviewed

## 16. R0A-2003-000-10371-0 Kwang-Sup Soh (PI) 06/25/03-06/24/08

National Research Laboratory, National Research Foundation of Korea (NRF), Ministry of Education (MOE, Korea), Ministry of Science, ICT and Future Planning (MSIP, Korea) KRW 1,150,000,000

Study on Biophysical Mechanism of Acupuncture Points and Meridians for Diagnosis and Treatment of Korean Medicine.

The goal of this project was to study physiological and biophysical characteristics of anatomical structure under the acupuncture points and meridians.

Role: Co-Investigator

Externally competitive and peer-reviewed

## K. Editorship/Reviewer Board Member

## **Journal List for Editorial Board**

Frontiers in Oncology (Review Editor on the Editorial Board of Radiation Oncology, Since 2020 July)

International Journal of Molecular Sciences (Topic Editor on the Editorial Board, Since 2020 August)

## **Journal List for Reviewer Board**

Information (Reviewer Board Member, Since 2020 March)
Journal of Imaging (Reviewer Board Member, Since 2020 July)

# L. Ad Hoc Reviewer for the Following Journals/Conferences

#### Journal

Theranostics, Journal of Experimental and Clinical Cancer Research, Journal of Imaging, Cancers, Electronics, Machine Learning and Knowledge Extraction, Frontiers in Oncology, Cells, Sensors, Current Molecular Pharmacology, Information, Diagnostics, Molecules, Applied Sciences-Basel, International Journal of Molecular Sciences, Scientific Reports, PLOS ONE, Molecular Imaging, Molecular Imaging and Biology, Biomedical Optics Express Review of Scientific Instruments, Stem Cells and Development, Journal of Acupuncture and Meridian Studies, Cancer Epidemiology, Biomarkers & Prevention, Journal of International Society of Life Information Science

#### Conference

World Molecular Imaging Congress 2020

# M. Reviewer for Research Grants/Proposals

Individual Basic Science & Engineering Research Program, National Research Foundation of Korea, Ministry of Science, ICT and Future Planning, South Korea National Cancer Control Research Program, National Cancer Control Planning Board,

Ministry of Health and Welfare, South Korea Industry Convergence Fundamental Technology Development Program, Korea Evaluation Institute of Industrial Technology, Ministry of Trade, Industry and Energy, South Korea

### N. Institutional Service

19 Feb. 2022	Co-Chair, Medical Physics Career Day, Department of Health Technology and Informatics (HTI), The Hong Kong Polytechnic University (PolyU)
02 Sep. 2020 - present	Founding Member, Deputy Programme Leader, Master of Science in Medical Physics Programme, HTI, PolyU
14 June. 2019 - present	Reviewer, Postgraduate Symposium 2019, 2000, 2021, 2022, HTI, PolyU
23 Jan. 2019 - present	Seminar Coordinator, HTI Departmental Research Seminar (HTI6201, HTI6202, HTI6203, HTI6204 Research Seminar I, II, III, IV subjects)
1 Sep. 2018 - present	Reviewer, Human Subjects Ethics Application, HTI, PolyU
1 Sep. 2018 - present	Member, Department Research Committee (DRC), HTI, PolyU
1 Jan. 2018 - present 1 Sep. 2017 - present	Lab-in-Charge, Translational Imaging Laboratory, In Vivo Imaging Laboratory Year Tutor, Year 2 BSc in Radiography Students

## O. Supervision of Students

## PhD (1 as chief supervisor, 1 as co-supervisor)

30 September 2021, WONG Ngai Nick Alex 17 January 2022, YEUNG Ho Yin Martin (as co-supervisor) Expected - September 2022, MAHANTY Arpan Expected - February 2023, YANG Minfeng Expected - December 2024, HE ZeBang

#### **DHSc (Doctor of Health Science)**

September 2022, TANG Chung Ting September 2022, LAU Yu Ching (as co-supervisor)

#### Faculty of Health and Social Sciences Summer Research Studentship (6)

2018/2019 – WONG Chun Kin, WAN Ka Wing 2019/2000 – LEE Lap San 2000/2021 – AU Ching Wai, SUNG Chun Ki 2021/2022 – YIP Hoi Lam

#### Training of Undergraduate Students under ECS Grant for Educational Activities

30 April 2020 – 31 December 2020, WONG Chun Yin 1 July 2018 – 25 June 2020, WAN Ka Wing 04 June 2018 – 28 June 2019, SIN Chun Lok

#### **BSc Final Year Project Supervision (67)**

67 students since 2018