

Sung-Yon Kim, Ph.D.sungyonkim@snu.ac.krsungyonkimlab.org

Associate Professor, Department of Chemistry
Program Director, Graduate Program in Molecular Biology and Genetics
 Seoul National University, Seoul, South Korea

Education & Training

2013 – 2015	Postdoctoral fellow	Massachusetts Institute of Technology
2009 – 2013	Ph.D. in Neuroscience	Stanford University
2003 – 2009	B.S. in Chemistry and Biological Sciences (2004 – 2005) Military service in South Korea	Seoul National University. <i>summa cum laude</i>

Faculty Appointments

2023 –	Program Director	Graduate Program in Molecular Biology and Genetics, SNU
2022 – 2023	Visiting Scholar	Department of Neurobiology, UC San Diego
2021 –	Associate Professor	Department of Chemistry, SNU
2020 –	Invited Investigator	Korea Brain Research Institute (KBRI)
2015 – 2021	Assistant Professor	Seoul National University (SNU)

Affiliations at SNU. Dept of Biological Sciences (2020-), Program in Biophysics and Chemical Biology (2017-2023), Brain-Mind-Behavior Program (2017-), Institute of Molecular Biology and Genetics (2016-), Dept of Biophysics and Chemical Biology (2015-2017), Program in Molecular Biology and Genetics (2015-), Program in Neuroscience (2015-)

Honors & Awards (Selected)

2022	Hanseong Science Award	Hanseong Foundation
2022	Asan Award in Medicine	Asan Foundation
2020	Commendation for the Promotion of Healthcare Technology	Ministry of Health and Welfare, Korea
2018	Young Researcher Award	National Research Foundation of Korea
2014	Donald B. Lindsley Prize in Behavioral Neuroscience	Society for Neuroscience
2014	LSRF Postdoctoral Fellowship	Life Sciences Research Foundation

Publications (Selected)

1. Kim SR, ... , [Kim SY](#). A neural circuit integrating sensory and memory signals underlying social novelty preference. *Under revision (Nature)*.
2. Kim M, ... , [Kim SY](#). A pharynx-to-forebrain circuit for rapid thirst quenching. *Under revision (Cell)*.
3. Jung S, ... , [Kim SY](#). Hindbrain cold-sensitive neurons orchestrate integrated homeostatic responses. *Under revision (Nature Metabolism)*.
4. Pac J, Koo DJ, Cho H, Jung D, Choi M, Choi Y, Kim B, Park JU, [Kim SY](#)*, Lee Y*. (2022). Three-dimensional imaging and analysis of pathological tissue samples with de novo generation of citrate-based fluorophores. *Sci Adv.* 8(46):eadd9419. *co-correspondence
5. Kim M, Heo G, [Kim SY](#). (2022). Neural signalling of gut mechanosensation in ingestive and digestive processes. *Nature Reviews Neuroscience.* 23(3):135-156.
6. Jung S, Lee M, Kim DY, Son C, Ahn BH, Heo G, Park J, Kim M, Park HE, Koo DJ, Park JH, Lee JW, [Kim SY](#). (2022). A forebrain neural substrate for behavioral thermoregulation. *Neuron.* 110(2):266-279. *featured as Previews by Dr. Amber Alhadeff, *Neuron* 110(2):180–182.

7. Lee S, Kim S, Koo DJ, Yu J, Cho H, Lee H, Song JM, Kim SY*, Min DH*, Jeon NL*. (2021). 3D microfluidic platform and tumor vascular mapping for evaluating anti-angiogenic RNAi-based nanomedicine. **ACS Nano**. 15(1):338-350. **co-correspondence*
8. Kim DY, Heo G, Kim M, Kim H, Jung S, An M, Ahn BH, Park JH, Park HE, Lee M, Lee JW, Schwartz GJ, Kim SY. (2020). A neural circuit mechanism for mechanosensory feedback control of ingestion. **Nature**. 580(7803):376–380.
**featured as lead Highlight in Nature Reviews Gastroenterology & Hepatology 2020, 17:315.*
**selected as one of the Top 100 National Research and Development Projects in 2021*
9. Park HE, Choi D, Park JS, Sim C, Park S, Kang S, Lim H, Lee M, Kim J, Pac J, Rhee K, Lee J, Lee Y, Lee Y, Kim SY. (2019). Scalable and isotropic expansion of tissues with simply tunable expansion ratio. **Adv Sci**. 6:1901673. **featured as the front cover*
10. Kim SY, Cho JH, Murray E, Bakh N, Choi H, Ohn K, Ruelas L, Hubbert A, McCue M, Vassallo SL, Keller PJ, Chung K. (2015). Stochastic electrotransport selectively enhances the transport of highly electromobile molecules. **Proc Natl Acad Sci U S A**. 112(46):E6274-83.
11. Kim SY, Chung K, Deisseroth K. (2013). Light microscopy mapping of connections in the intact brain. **Trends Cogn Sci**. 17(12):596-9.
12. Kim SY, Adhikari A, Lee SY, Marshel JH, Kim CK, Mallory CS, Lo M, Pak S, Mattis J, Lim BK, Malenka RC, Warden MR, Neve R, Tye KM, Deisseroth K. (2013). Diverging neural pathways assemble a behavioural state from separable features in anxiety. **Nature**. 496(7444):219-23.
**featured as News and Views by Dr. Joshua Johansen, Nature 496(7444):174–175.*
13. Tye KM*, Prakash R*, Kim SY*, Fenno LE, Grosenick L, Zarabi H, Thompson KR, Gradinaru V, Ramakrishnan C, Deisseroth K. (2011). Amygdala circuitry mediating reversible and bidirectional control of anxiety. **Nature**. 471(7338):358-62. **equal contribution*

Complete List of Published Work: [Google Scholar](#), [ORCID](#), [NCBI MyBibliography](#), [Full CV file](#)

Intellectual Properties (Selected)

1. Ahn HJ, Kim SY. (2023). Automated apparatus for stereotactic surgical device. KR102525496B1, US12011321B2
2. Chung K, Kim SY, Ohn K, Murray E, Cho JH. (2015). Active transport of charged molecules into, within, and/or from charged matrices. US10416116B2, EP3126037B1, CN106211762B
3. Kim SY, Deisseroth K, Adhikari A. (2014). Optogenetic control of behavioral state. US10974064B2, EP2968997B1, CN105246550A, AU2014227600B2, ES2742492T3

Professional Activities (Selected)

- | | |
|-------------|--|
| 2027 | Co-organizer, Keystone Symposia on Neurobiology of Appetite Control. Keystone, CO, U.S. |
| 2025 | Co-organizer, Samsung Global Research Symposium on the Science and Engineering of Brain-Body Interactions. Stockholm, Sweden |
| | Organizer, SNU Neuro-Chemical-Metabolism Symposium. Seoul |
| | Organizer, The 2 nd Annual Meeting of the Global BRL on Thermoregulation. Seoul |
| 2025 – 2027 | Academic Committee, Korean Society for the Study of Obesity (KOSSO) |
| 2024 | Organizer, The 1 st Annual Meeting of the Global Basic Research Laboratory on Neural Circuits for Thermoregulation. Seoul |
| 2022 – 2025 | Trainee Professional Development Awards Selection Committee, SfN |
| 2022 – 2024 | Diversity Committee, SSIB |
| 2021 – 2024 | Program Committee, Society for the Study of Ingestive Behavior (SSIB) |

2021 – 2023 Program Manager (Neurobiology RB), National Research Foundation of Korea
 2021 – Editorial Board, *Molecules and Cells*
 2021 – Member, Young Korean Academy of Science and Technology (Y-KAST)
 2021 – 2023 Academic Committee, Korean Endocrine Society (KES)
 2021 – 2022 Academic Committee, Korean Society for Brain and Neural Science (KSBNS)
Reviewing of manuscripts. ad-hoc reviewer for *Nature*, *Cell*, *Nature Neuroscience*, *Neuron*, *Nature Biotechnology*, *Nature Methods*, *Science Advances*, *Nature Communications*, *Biological Psychiatry*, *Proc Natl Acad Sci U S A.*, *Cell Reports*, *Neuropsychopharmacology*, *eLife*, etc.
Reviewing of grant proposals. National Research Foundation of Korea (NRF), Samsung Science & Technology Foundation, European Research Council (ERC)

Invited Talks (Selected among invited talks in the last 3 years)

2027	Keystone Symposia on Neurobiology of Appetite Control	Keystone, CO, U.S. (<i>Scheduled</i>)
2026	Molecular Psychiatry Meeting	Lihue, HI, U.S. (<i>Scheduled</i>)
	Gordon Research Conference (Social Behavior)	Pomona, CA, U.S. (<i>Scheduled</i>)
	Keystone Symposia on Gut-Brain Axis	Breckenridge, CO, U.S. (<i>Scheduled</i>)
2025	Center for Physiology, University of Cologne	Cologne, Germany
	131 st International Titisee Conference on Thermoregulation	Titisee, Germany
	Institute for Immunology, Tsinghua University	Beijing, China
	Japanese Assoc. for the Study of Taste and Smell	Osaka, Japan
	Global Research Symposium on Body-Brain Interactions	Stockholm, Sweden
	Keystone Symposia on Interoception	Seattle, WA, U.S.
2024	Janelia Conference on Sensory Biology of Ingestion	Ashburn, VA, U.S.
	Workshop on the Social Brain	Baeza, Spain
	Westlake University	Hangzhou, China
	Zhejiang University	Hangzhou, China
	Cold Spring Harbor Asia Summer Imaging Course	Suzhou, China
	Gordon Research Conference on Optogenetics)	Barga, Italy
2023	Department of Neurobiology, Harvard Medical School	Boston, MA, U.S.
	4D Cellular Physiology, HHMI Janelia Research Campus	Ashburn, VA, U.S.
	Department of Physiology, UCSF	San Francisco, CA, U.S.
	Department of Neurobiology, Northwestern University	Evanston, IL, U.S.
	Robert Whitney Newcomb Memorial Lecture, NIH	Bethesda, MD, U.S.
	Neurobiology & Neural Systems Seminar, Caltech	Pasadena, CA, U.S.
	Synapse-to-Circuit Seminar Series, UCLA	Los Angeles, CA, U.S.
	Department of Neuroscience, UT Southwestern	Dallas, TX, U.S.

Mentoring & Teaching

Mentored >20 graduate and undergraduate researchers; trainees now Ph.D. or postdoctoral researchers at Harvard, MIT, Rockefeller, UCSD, UCLA, etc.

Cold Spring Harbor Asia. Summer Imaging Course. Suzhou, China (2024).

SNU. Molecular Neurobiology (3391.503), Optogenetic Approaches to Neuroscience (M1430.001200), Techniques in Neurosciences (M1430.001400), Methods in Brain Sciences (M1427.000200), etc.

MIT. CLARITY workshop instructor.

Stanford. Optogenetics workshop instructor. Molecular and Cellular Neurobiology TA.

Book Chapter

Seo J., Koo DJ., Kim SY. (2019) Chemical Processing of Brain Tissues for Large-Volume, High-Resolution Optical Imaging. In: Kao FJ., Keiser G., Gogoi A. (eds) *Advanced Optical Methods for Brain Imaging*. Progress in Optical Science and Photonics, vol 5. Springer, Singapore

Professional Activities (Full List)

2025 – 2027 Academic Committee, Korean Society for the Study of Obesity (KOSSO)
 2022 – 2025 Trainee Professional Development Awards Selection Committee, SfN
 2022 – 2024 Diversity Committee, SSIB
 2022 – 2023 Research Committee, Korean Diabetes Association
 2022 Nanosymposium Chair, Neuroscience 2022, Society for Neuroscience (SfN)
 2021 – 2024 Program Committee, Society for the Study of Ingestive Behavior (SSIB)
 2021 Founding Member, Homeostasis Section in KSBNS
 2021 – 2023 Program Manager (Neurobiology RB), National Research Foundation of Korea
 2021 – Editorial Board, *Molecules and Cells*
 2021 – Member, Young Korean Academy of Science and Technology (Y-KAST)
 2021 – 2023 Academic Committee, Korean Endocrine Society (KES)
 2021 – 2023 Program Committee, China-Japan-Korea (CJK) Neuroscience Meeting
 2021 – 2022 Academic Committee, Korean Society for Brain and Neural Science (KSBNS)
 2019 – Member, Society for the Study of Ingestive Behavior (SSIB)
 2018 Education Committee, Korean Society for Molecular and Cellular Biology (KSMCB)
 2015 – Member, Korean Society for Brain and Neural Science (KSBNS)
 2015 – Member, Korean Society for Molecular and Cellular Biology (KSMCB)
 2009 – Member, Society for Neuroscience (SfN)

Conference/Symposia Organization (Full List)

2027 Keystone Symposia on Neurobiology of Appetite Control. Keystone, CO, U.S. Co-organizer.
 2025 SNU Neuro-Chemical-Metabolism Symposium. Seoul. Organizer.
 The 2nd Annual Meeting of the Global Basic Research Laboratory on Neural Circuits for Thermoregulation. Seoul. Organizer.
 2024 The 1st Annual Meeting of the Global Basic Research Laboratory on Neural Circuits for Thermoregulation. Seoul. Organizer.
 2021 The Chemical Senses: From Molecules to Behavior. Online.
 2019 Summer Symposium on Neural Circuitry. Yeongwol. Organizer.
 2019 Winter Symposium on Neural Circuitry. Gapyeong. Organizer.

Reviewer Activity (Full List)

Reviewing of manuscripts: ad-hoc reviewer for *Nature*, *Cell*, *Nature Neuroscience*, *Neuron*, *Nature Biotechnology*, *Nature Methods*, *Science Advances*, *Nature Communications*, *Biological Psychiatry*, *Proc Natl Acad Sci U S A.*, *Cell Reports*, *Neuropsychopharmacology*, *eLIFE*, *Nanoscale*, *ACS Nano*, *ACS Chemical Neuroscience*, *iScience*, *Molecular Brain*, *Scientific Reports*, *Cells*, *Frontiers in Molecular Neuroscience*, *Frontiers in Behavioral Neuroscience*, *Experimental Neurobiology*, *Analytical Methods*

Reviewing of grant proposals: National Research Foundation of Korea (NRF), Samsung Science & Technology Foundation, European Research Council (ERC)

Teaching (Full List)

Cold Spring Harbor Asia. Summer Imaging Course. Suzhou, China (2024).

Seoul National University. Molecular Neurobiology (3391.503), Optogenetic Approaches to Neuroscience (M1430.001200), Techniques in Neurosciences (M1430.001400), Methods in Brain Sciences (M1427.000200), Advanced Genetic Engineering 1: Neurobiology and Gut-Brain Neural Circuits (322.511), Advanced Genetic Engineering 2: Bio-Imaging (322.512), Understanding Modern Biology (3346.210B), Special Topics in Biophysics (338.701), Biophysics and Chemical Biology Seminar (338.505), Special Topics in Chemical Biology (338.702), Neurochemistry (M1409.000600), Advanced Biochemistry (3343.551), Molecular Biochemistry (3343.409A), General Chemistry (034.020).

MIT. CLARITY workshop instructor.

Stanford. Optogenetics workshop instructor. Molecular and Cellular Neurobiology TA.

Mentoring (Full List)

2024 – Myungsun Nam, graduate student, Chemistry, SNU
 2024 – Anna Kondaurova, graduate student, Chemistry, SNU
 2024 – Jin-Seong Kim, graduate student, Chemistry, SNU
 2023 – 2025 JiSoo Kwon, graduate student, Chemistry, SNU
 2022 – Hyeongjun Cho, graduate student, Chemistry, SNU
 2022 – Junkoo Park, graduate student, Chemistry, SNU
 2022 – Gil Ju Han, graduate student, Chemistry, SNU
 2020 – 2022 Hyun-Kyung Kim, graduate student, Chemistry, SNU
 2019 – Ben H. Ahn, graduate student, Chemistry, SNU
 2018 – 2026 Sieun Jung, graduate student, Neuroscience, SNU
 2018 – 2026 Minyoo Kim, graduate student, Chemistry, SNU
 2018 – Myungmo An, graduate student, Chemistry, SNU
 2017 – 2021 Gyuryang Heo, post-graduate researcher, SNU
 2017 – Seong-Rae Kim, graduate student, Chemistry, SNU
 2017 – 2019 Kyunghoe Kim, graduate student, Chemistry, SNU
 2017 – Myungsun Lee, graduate student, Chemistry, SNU
 2016 – 2018 Jong Hwi Park, post-graduate researcher, SNU
 2016 – 2026 Dong-Jun Koo, graduate student, Neuroscience, SNU
 2016 – 2024 Han-Eol Park, graduate student, Biology, SNU
 2016 – 2022 Dong-Yoon Kim, graduate student, Neuroscience, SNU

Invited Talks (Full List)

2027 Keystone Symposia on Neurobiology of Appetite Control. Keystone, CO, U.S. (*Scheduled*)
 2026 Molecular Psychiatry Meeting. Lihue, HI, U.S. (*Scheduled*)
 Gordon Research Conference (Social Behavior). Pomona, CA, U.S. (*Scheduled*)
 Keystone Symposia on Gut-Brain Axis. Breckenridge, CO, U.S. (*Scheduled*)
 The 2nd Greater Bay Area Neuroscience Meeting. Shenzhen, China. (*Scheduled*)
 2025 Program in Neuroscience, Seoul National University. Seoul.
 Brain Research Institute Symposium, Yonsei University. Seoul.
 Center for Synaptic Brain Dysfunctions, Institute for Basic Science. Daejeon.
 Gastronomists International Conference. Tucson, AZ, U.S.

- Center for Physiology, University of Cologne. Cologne, Germany.
 131st International Titisee Conference on Thermoregulation. Titisee, Germany.
 Institute for Immunology, Tsinghua University. Beijing, China.
 National Institute of Biological Sciences. Beijing, China.
 59th Annual Meeting of the Japanese Association for the Study of Taste and Smell. Osaka, Japan.
 SNU Neuro-Chemico-Metabolism Symposium. Seoul.
 The 28th Annual Meeting of the Korean Society for Brain and Neural Sciences. Songdo.
 3rd Minisymposium, the Genetics Society of Korea. Online.
 Samsung Global Research Symposium on Body-Brain Interactions. Stockholm, Sweden.
 Keystone Symposia on Interoception. Seattle, WA, U.S.
 Graduate School of Medical Sciences and Engineering, KAIST. Daejeon.
 Annual meeting, Korean Society for the Study of Obesity. Seoul.
 Annual Meeting of Homeostasis Section of KSBNS. Daegu.
- 2024 Department of Biology, KAIST. Daejeon.
 Department of Biomedical Science & Engineering, GIST. Gwangju.
 Janelia Conference on Sensory Biology of Ingestion. Ashburn, VA, U.S.
 Department of Biology, Korea University. Seoul.
 Department of Brain Science, DGIST. Daegu.
 Korea Brain Research Institute (KBRI). Daegu.
 Department of Brain and Cognitive Science, Seoul National University. Seoul.
 Department of Bioengineering, Yonsei University. Seoul.
 Workshop on the Social Brain. Baeza, Spain.
 KRIBB-KBRI Neuroscience Joint Symposium. Daejeon.
 Department of Physiology, Seoul National University. Seoul.
 Westlake University. Hangzhou, Zhejiang, China.
 Zhejiang University. Hangzhou, Zhejiang, China.
 Cold Spring Harbor Asia summer imaging course. Suzhou, China.
 Gordon Research Conference (Optogenetics). Barga, Lucca, Italy.
 Korea Research Institute of Bioscience & Biotechnology (KRIBB). Daejeon.
 Ajou University School of Medicine. Suwon.
 Institute of Basic Science – Max Planck Institute Conference. Seoul.
 Annual Meeting of Homeostasis Section of KSBNS. Daejeon.
- 2023 School of Dentistry, Seoul National University. Seoul.
 29th East Asia Joint Symposium. Cheonan.
 Samsung Global Technology Conference. Seoul.
 Department of Biochemistry, Yonsei University. Seoul.
 26th Annual Meeting, Korean Society for Brain and Neural Science. Busan.
 Department of Neurobiology, Harvard Medical School. Boston, MA, U.S.
 4DCP Seminar, HHMI Janelia Research Campus. Ashburn, VA, U.S.
 Department of Physiology, UCSF, CA, U.S.
 Department of Neurobiology, Northwestern University. Evanston, IL, U.S.
 Department of Neurobiology and Anatomy, UTHealth Houston. Houston, TX, U.S.
Robert Whitney Newcomb Memorial Lecture, NIH. Bethesda, MD, U.S.
 Neurobiology and Computation & Neural Systems Seminar, Caltech. Pasadena, CA, U.S.

- Brain-Body Seminar Series, Icahn School of Medicine at Mount Sinai. New York, NY, U.S.
 Monell Chemical Senses Center. Philadelphia, PA, U.S.
 Child Health Institute of New Jersey, Rutgers University. New Brunswick, NJ, U.S.
 Neuroscience Seminar Series, Department of Neuroscience, UT Austin. Austin, TX, U.S.
 Brain-Body Interactions seminar series. Online.
 Synapse To Circuit (S2C) Seminar Series, UCLA. Los Angeles, CA, U.S.
 Neuroscience Seminar Series, Department of Neuroscience, UT Southwestern. Dallas, TX, U.S.
 Brain-Body Interface Seminar Series (of Chinese neuroscience community). Online.
 Diabetes & Obesity Research Institute, USC. Los Angeles, CA, U.S.
 College of Dentistry, Kyungpook National University. Online.
- 2022 Korean Bio-scientists in San Diego (KBSD). San Diego, CA, U.S.
 Neuroscience Seminar Series, UC Berkeley. Berkeley, CA, U.S.
 Cellular & Systems Neuroscience Seminar Series, UC Santa Barbara. Santa Barbara, CA, U.S.
 Hotchkiss Brain Institute Seminar Series, University of Calgary. Calgary, Canada.
 20th Anniversary Symposium, Picower Institute, MIT. Cambridge, MA, U.S.
 Ascona Conference on Gut-Brain Communication. Ascona, Switzerland.
 Gordon Research Conference (Hypothalamus). Ventura, CA.
 Sorak Conference, Korean Society for Biochemistry and Molecular Biology. Sokcho.
 Department of FoodTech, Seoul National University. Seoul.
 Department of Life Sciences, University of Seoul. Seoul.
 Korea Dementia Research Center. Online.
 Materials Korea Forum 2022, Materials Research Institute. Online.
 Department of Neuroscience, Kyung Hee University. Online.
 Astronauts Seminar Series. Online.
 Korean Society for Cell Biology. Online.
- 2021 10th DGIST Brain and Cognitive Science Student Symposium. Daegu. Online.
 Annual Meeting, the Korean Society for Cognitive Science. Online.
 College of Medicine, Sungkyunkwan University. Online.
 Department of Preventative Medicine and Public Health, Yonsei University School of Medicine.
 Department of Chemistry, Dongguk University. Seoul.
 2nd International Conference of Korean Society for Metabolic and Bariatric Surgery. Seoul.
 2021 Annual Meeting of the Society for the Study of Ingestive Behavior. Online.
 Biophysics School, Postech. Pohang. Online.
 20th HFSP Awardees Meeting. Online.
 Department of Biological Sciences, UNIST. Online.
 Department of Bio and Brain Engineering. KAIST. Online.
 23rd Annual Meeting, Korean Society for Brain and Neural Science. Incheon.
 Department of Biotechnology, Yonsei University. Online.
 Annual meeting, Korean Society for the Study of Obesity. Seoul.
 Department of Biological Sciences, KAIST. Online.
 Center for Nanomedicine, Institute for Basic Science. Seoul.
 Green Ribbon Lecture, Korean Society for Molecular and Cellular Biology. Online.
- 2020 23rd Annual Meeting, Korean Society for Brain and Neural Science. Seoul.
 Center for Cognition and Sociality, Institute for Basic Science. Daejeon.

- Department of Physiology, Seoul National University School of Medicine. Online.
 Department of Medicine, Columbia University. Online.
 69th Annual Meeting, Korean Association of Anatomists. Gangneung.
 Department of Biochemistry, Seoul National University School of Medicine. Seoul.
 Division of Life Sciences, Korea University, Seoul.
 Department of Medical Sciences, Yonsei University College of Medicine. Online.
 International Congress of Diabetes and Metabolism. Seoul.
 Department of Biological Sciences, Konkuk University. Online.
 43rd Annual Meeting of the Japan Neuroscience Society. Online.
 International Symposium, Korean Association for Laboratory Animal Science. Pyeongchang.
 Program in Neuroscience, Seoul National University, Online.
 Department of Chemistry, Seoul National University, Online.
- 2019 College of Medicine, Sungkyunkwan University. Suwon.
 International Conference of the Korean Society for Molecular and Cellular Biology. Seoul.
 Department of New Biology, DGIST. Daegu.
 27th Summer Workshop, Korean Diabetes Association. Yangpyeong.
 Department of Physiology, Korea University School of Medicine. Seoul.
 7th Seoul International Congress of Endocrinology and Metabolism. Seoul.
 Division of Biomedical Science, Kyungpook National University. Daegu.
 Department of Chemistry, KAIST. Daejeon.
 Annual meeting, Korean Society for the Study of Obesity. Seoul.
 Department of Anatomy, Korea University School of Medicine. Seoul.
 Annual meeting, Korean Society for Neurodegenerative Disease. Seoul.
 Department of Brain and Cognitive Sciences, Seoul National University, Seoul
 Weizmann Institute of Science. Israel.
- 2018 School of Medicine, Seoul National University. Seoul.
 Center for Neural Science, KIST. Seoul.
 Department of Biomedical Engineering, Sungkyunkwan University. Suwon.
 7th Annual Meeting, Korean Neuroendocrine Study Group. Incheon.
 21st Annual Meeting, Korean Society for Brain and Neural Science. Seoul.
 KAIST Biological Sciences Symposium. KAIST, Daejeon.
 Gordon Research Conference (Optogenetics). Newry, ME. *Selected from posters*.
 Department of Life Science, POSTECH. Pohang.
 24th Congress, International Union of Biochemistry and Molecular Biology. Seoul.
 Department of Biological Sciences, Konkuk University. Seoul.
 Department of Brain and Cognitive Sciences, DGIST. Daegu.
 Interpark Bio-Convergence Center. Seoul.
- 2017 120th General Meeting, Korean Chemical Society. Gwangju.
 24th East Asia Joint Symposium. Otsu, Japan.
 Korea Brain Research Institute. Daegu.
 21st Annual Symposium, Korean Peptide Protein Society. Jeju.
 A3 Foresight Program. Seoul National University. Seoul.
 Computational Neuroscience Winter School, Korean Society for Comp. Neuroscience. Pohang.
- 2016 Annual Biophotonics Conference. KAIST, Daejeon.

- 23rd East Asia Joint Symposium. NTNU, Taipei, Taiwan.
 International Conference of the Korean Society for Molecular and Cellular Biology. Seoul
 Center for Functional Connectomics, KIST. Seoul.
 19th Annual Meeting, Korean Society for Brain and Neural Science. Ilsan.
 Department of Brain and Cognitive Sciences, DGIST. Daegu.
 School of Chemical and Biological Engineering, Seoul National University. Seoul.
 College of Medicine, Yonsei University. Seoul.
 30th World Congress, The International College of Neuropsychopharmacology. Seoul.
 College of Life Sciences, GIST. Gwangju.
 Department of Psychology, Korea University. Seoul.
 Zeiss Korea Microscopy Workshop. Gumi.
 School of Medicine, Seoul National University. Seoul.
 Spring Symposium, Korean Academy of Anxiety Disorder. Jeonju.
 Department of Chemistry, UNIST. Ulsan.
 Department of Life Science, Ewha Woman's University. Seoul.
 Systems Neuroscience Symposium 2016. Suwon.
 Department of Systems Biology, Yonsei University. Seoul.
 Department of Psychiatry, Seoul National University College of Medicine. Seoul.
 Winter Symposium, Winter Korean Association for Laboratory Animal Science. Pyeongchang.
 Department of Biological Sciences, KAIST. Daejeon.
- 2015 Department of Brain and Cognitive Sciences, Seoul National University, Seoul.
 Center for Nanomedicine, Institute for Basic Science. Seoul.
 International Metabolic Disease Symposium. UNIST, Ulsan.
 Center for Genome Engineering, Institute for Basic Science. Seoul.
 School of Dentistry, Seoul National University. Seoul.
 Center for Neuroscience Imaging Research, Institute for Basic Science. Suwon.
 Samsung Advanced Institute of Technology. Suwon.
 Department of Chemistry, Seoul National University, Seoul.
 Department of Brain and Cognitive Sciences, Seoul National University, Seoul.
 International Conference of the Korean Society for Molecular and Cellular Biology. Seoul.
 Center for Cognition and Sociality, Institute for Basic Science. Daejeon.
 Center for Neuroscience, UC Davis. Davis, CA.
 Department of Life Science, POSTECH. Pohang.
- 2014 Department of Biological Sciences, Seoul National University. Seoul.
 Department of Biological Sciences, KAIST. Daejeon.
 Department of Brain and Cognitive Sciences, Picower Institute for Learning and Memory, McGovern
 Institute, MIT. Joint Annual Retreat. Falmouth, MA.
- 2013 Department of Biological Sciences, KAIST. Daejeon.
 36th Annual Meeting, Japanese Neuroscience Society. Kyoto, Japan.
 RIKEN Brain Science Institute. Wako, Japan.

Honors & Awards (Full List)

- 2022 Hanseong Science Award in Life Sciences, Hanseong Foundation
 한성과학상, 한성손재한장학회

2022	Asan Award in Medicine, Asan Foundation 아산의학상(젊은의학자부문), 아산사회복지재단
2021	Green Ribbon Lecture, Korean Society for Molecular and Cellular Biology 한국분자세포생물학회 Green Ribbon Lecture
2020	Commendation for the Promotion of Healthcare Technology, Ministry of Health and Welfare 보건의료기술진흥 유공자 정부포상(신진연구부문, 장관표창), 보건복지부
2020	Member of Young Korean Academy of Science and Technology (Y-KAST) 한국차세대과학기술한림원(Y-KAST) 회원(이학부, 생물학, 신경생물학)
2020	Scitech Korea Young Neuroscientist Award, Korean Society for Brain and Neural Sciences 사이텍코리아 젊은과학자상, 한국뇌신경과학회
2020	Travel Award, the Japan Neuroscience Society
2019	Young Scientist, World Economic Forum Annual Meeting of New Champions
2018	Young Researcher Award, National Research Foundation of Korea 올해의 신진연구자, 한국연구재단
2015	Poster Award, Molecular and Cellular Cognition Society, 14 th annual meeting
2015 – 2017	Chung-am Science Fellowship (for Junior Faculty), POSCO TJ Park Foundation 청암과학펠로십(신진교수, 생명과학), 포스코청암재단
2015	Travel Award, Korean Society for Molecular and Cellular Biology
2015 – 2016	SNU Invitation Program for Distinguished Scholar, Seoul National University
2014	Donald B. Lindsley Prize in Behavioral Neuroscience, Society for Neuroscience
2014	Postdoctoral Fellow Travel Award, Society for Neuroscience
2014 – 2015	Life Sciences Research Foundation Postdoctoral Fellowship
2013 – 2014	Simons Postdoctoral Fellowship
2012	Brain & Cognitive Sciences Research Award, Association of Korean Neuroscientists
2012	Best Speaker Award, Samsung Scholarship Annual Meeting
2011	Poster Award, Gordon Research Conference
2011	Travel Award, Gordon Research Conference
2009 – 2013	Samsung Scholarship
2008	Best Poster Award, 9th International Congress on Cell Biology
2008	Academic Excellence Award, Seoul National University
2003 – 2008	Presidential Science Scholarship, Korea Science and Engineering Foundation

Publications (Full List)

1. Kim SR, Kim J, Kim SY. A neural circuit integrating sensory and memory signals underlying social novelty preference. *In revision (Nature)*.
2. Kim M, Koo DJ, Han G, Cho H, Kim SY. A pharynx-to-forebrain circuit for rapid thirst quenching. *In revision (Cell)*.
3. Jung S, Lee M, Kondaurava A, Kwon JJ, Sa M, Shin H, Kim SY. Hindbrain cold-sensitive neurons orchestrate integrated homeostatic responses. *In revision (Nature Metabolism)*.

4. Choi SG, Kim S, Kim JW, Choi MK, Han J, Koo DJ, Lee SH, Kim A, Gu JW, Kim KH, Lee JY, Bae JY, Kim SY, Kim J, Lee H, Kang SK. (2025). Dual-phoretic wireless device for directionally oriented and carrier-free targeted drug delivery. **Sci Adv.** 11(28):eads9269.
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