# DONGIL CHUNG, Ph.D.

Department of Biomedical Engineering

UNIST

50 UNIST-gil, Ulsan 44919, South Korea

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## EDUCATION AND EMPLOYMENT

2006 Dept. of Bioengineering

BS KAIST, Daejeon, South Korea

Field: Bioengineering

2011 Dept. of Bio and Brain Engineering

PhD KAIST, Daejeon, South Korea (PI: Jaeseung Jeong, PhD)

> Field: Bioengineering, Computational Neuroscience, Neuroimaging,

Neuroeconomics

2011-8/2014 Virginia Tech Carilion Research Institute, Roanoke VA (PI: Pearl Chiu, PhD)

Postdoctoral Associate

9/2014-12/2017 Virginia Tech Carilion Research Institute, Roanoke, VA (PI: Pearl Chiu, PhD;

Sr. Research Associate Brooks King-Casas, PhD)

1/2018-3/2020 Fralin Biomedical Research Institute at VTC (formally, Virginia Tech Carilion

Research Institute), Roanoke, VA Research Faculty

1/2018-present Dept. of Biomedical Engineering, UNIST, Ulsan, South Korea

**Assistant Professor** 

#### PEER-REVIEWED RESEARCH ARTICLES

- \* equal contribution; # trainee co-author; † corresponding author
- Dongil Chung\*, Mark A. Orloff\*, Nina Lauharatanahirun, Brooks King-Casas, Pearl H. Chiu (in press). Valuation of peers' safe choices is associated with substance-naïveté in adolescents. PNAS, first published November 30, 2020. 10.1073/pnas.1919111117 https://www.pnas.org/content/early/2020/11/25/1919111117
- Dongil Chung, Kelly Kadlec, Jason A. Aimone, Katherine McCurry, Brooks King-Casas, Pearl H. Chiu (2017). Valuation in major depression is intact and stable in a non-learning environment. Scientific Reports, 7: 44374. doi: 10.1038/srep44373 https://www.nature.com/articles/srep44374
- Dongil Chung, George I. Christopoulos, Brooks King-Casas, Sheryl B. Ball, Pearl H. Chiu (2015). Social signals of safety and risk confer utility and have asymmetric effects on observers' choices. Nature Neuroscience, 18(6): 912-916. doi: 10.1038/nn/4022

https://www.nature.com/neuro/journal/v18/n6/full/nn.4022.html

Commentary in: David V. Smith & Mauricio R. Delgado (2015). Social nudges: utility conferred from others. *Nature Neuroscience*, **18**: 791-792

https://www.nature.com/neuro/journal/v18/n6/full/nn.4031.html

- Dongil Chung, Kyongsik Yun, Jaeseung Jeong (2015). Decoding covert motivations of free riding and cooperation from multi-feature pattern analysis of EEG signals, Social Cognitive and Affective Neuroscience, 10(9): 1210-1218. doi: 10.1093/scan/nsv006 https://academic.oup.com/scan/article-lookup/doi/10.1093/scan/nsv006
- Song E Kim, Won Sup Kim, Byung Gon Kim, Dongil Chung, Jaeseung Jeong, Jae Sung Lee, Woo Suk Tae, Seung Bong Hong, Hyang Woon Lee (2013). Spatiotemporal dynamics and functional correlates of evoked neural oscillations with different spectral powers in human visual cortex, Clinical *Neurophysiology*, **124**(11): 2248-2256 http://www.sciencedirect.com/science/article/pii/S1388245713006718
- <u>Dongil Chung</u>, Amir Raz, Jaewon Lee, Jaeseung Jeong (2013). Computational modeling of the negative priming effect based on inhibition patterns and working memory. Frontiers in Computational Neuroscience, 7 (166): 1-12. doi: 10.3389/fncom.2013.00166 http://journal.frontiersin.org/article/10.3389/fncom.2013.00166/full
- Jaewon Lee\*, Dongil Chung\*, Sumin Chang, Sungyo Kim, Sangwoo Kim, Hyunsang Park, Shinho Ryu, Jaeseung Jeong (2012). Gender Differences Revealed in the Right Posterior Temporal Areas during

Navon Letter Identification Task, Brain Imaging and Behavior, 6(3): 387-396. doi: 10.1007/s11682-012-9153-8

https://link.springer.com/article/10.1007/s11682-012-9153-8

- Kyongsik Yun, Dongil Chung, Bosun Jang, Jin Ho Kim, Jaeseung Jeong (2011). Mathematically gifted adolescents have deficiencies in social valuation and mentalization, *PLoS ONE*, 6(4): e18224 http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0018224
- Dongil Chung, Kyongsik Yun, Jin Ho Kim, Bosun Jang, Jaeseung Jeong (2011). Different gain/loss sensitivity and social adaptation ability in gifted adolescents during a public goods game, *PLoS ONE*, 6(2): e17044 http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0017044
- Dongil Chung, Yang-Tae Kim, Jaeseung Jeong (2011). Cognitive motivations of free-riding and cooperation and impaired strategic decision making in schizophrenia during a public goods game, Schizophrenia **Bulletin**, **39**(1): 112-119. doi:10.1093/schbul/sbr068

https://academic.oup.com/schizophreniabulletin/article/39/1/112/1886896/Cognitive-Motivations-of-Free-Riding-and

- Dongil Chung, Juhyun Jung, Jaeduck Jang, Jongchul Ye, Jaeseung Jeong, Kwang H. Lee (2006). An integrative analysis program for two-dimensional gel electrophoresis, *Interdisciplinary Bio Central*, 1(3): 146-151. doi: 10.4051/icbe.2009.3.0017
- Joowon Lee, Hana Kim, Wonhye Lee, <u>Dongil Chung</u>, Jong Bhak (2005). BioSubroutine: an open web server for bioinformatics algorithms and subroutines, Genomics & Informatics, 3(1):35-38

#### MANUSCRIPTS IN PREPARATION OR UNDER REVIEW

Jiwon Park#, Seungmin Lee, Sunhae Sul†, Dongil Chung† (under review). Depression symptoms mediate mismatch between perceived severity of the COVID-19 and diminished compliance with prevention measures

Preprint: <a href="https://psyarxiv.com/s4c79">https://psyarxiv.com/s4c79</a>

- Yeonju Shin\*, HeeYoung Seon\*#, Yun Kyong Shin, Oh-Sang Kwon†, <u>Dongil Chung†</u> (revise & resubmit). Subjective optimality in finite sequential decision-making
  - Preprint: https://www.biorxiv.org/content/10.1101/2020.07.15.204321v1.abstract
- Vincenzo G. Fiore, Nicholas DeFelice, Benjamin S. Glicksberg, Ofer Perl, Anastasia Shuster, Kaustubh Kulkarni, Madeline O'Brien, M.Andrea Pisauro, Dongil Chung, Xiaosi Gu (revise & resubmit). Containment of future waves of COVID-19: simulating the impact of different policies and testing

capacities for contact tracing, testing, and isolation

Preprint: https://www.medrxiv.org/content/10.1101/2020.06.05.20123372v1

Minho Hwang#, Sung-Phil Kim, <u>Dongil Chung†</u> (under review). Keeping things in mind for future thinking: Arithmetic booster reduces delay discounting

Preprint: https://www.biorxiv.org/content/10.1101/2020.03.03.974709v1

- Ji-Hyun Kim, Junsuk Kim, Jiwon Yeon, Jang-Yeon Park, <u>Dongil Chung</u>†, Sung-Phil Kim† (revise & resubmit). Neural correlates of tactile hardness intensity perception during active object exploration
- Soojung Na\*, Dongil Chung\*, Andreas Hula, Jennifer Jung, Vincenzo G. Fiore, Peter Dayan, Xiaosi Gu (under review). Humans use forward thinking to exert social control Preprint: https://www.biorxiv.org/content/10.1101/737353v2.abstract
- Dongil Chung, Kelly Kadlec, Sheryl B. Ball, Brooks King-Casas, Pearl H. Chiu (submitted). Evidence for preference consistency across risky, ambiguous, and vague gambles Preprint: https://psyarxiv.com/m24zx
- Mark A. Orloff\*, <u>Dongil Chung\*</u>, Xiaosi Gu\*, Zhixian Gao, Guiding Song, Chandana Tatineni, Xingchao Wang, Shuai Xu, Brooks King Casas, Pearl H. Chiu (in prep). Individuals with disrupted access to internal preferences blindly follow social others during risky decision-making
- Nina Lauharatanahirun, Sheryl Ball, Dongil Chung, Jason A. Aimone, Pearl H. Chiu, Jungmeen Kim-Spoon, Brooks King-Casas (revise & resubmit). Unrealistic expectations: The role of probability bias in adolescent risky decision-making
- <u>Dongil Chung</u>, Jacob Lee, Richard De La Garza, Thomas Newton, Brooks King-Casas, Pearl H. Chiu (in prep). Neurobehavioral evidence for cognitive enhancement in cocaine dependent individuals
- <u>Dongil Chung</u>, Jason A. Aimone, Brooks King-Casas, Pearl H. Chiu (in prep). Social fatigue: Neural substrates of fragile generosity under imposition
- Dongil Chung, Brooks King-Casas, George I. Christopoulos, Thomas Newton, Richard De La Garza, Pearl H. Chiu (in prep). Probability expectations explain increased conformity with risky social others in cocaine addiction

## RESEARCH FUNDING

Ongoing support

National Research Foundation of Korea

Kwon (PI)

09/01/20 - 08/31/23

2020S1A3A2A02097375

Delineating the mechanisms of cognitive biases underlying exaggeration of polarization and social conflicts in a hyper-connected society

Goal: To take multi-level and multi-disciplinary approach and investigate neural and behavioral mechanisms of cognitive biases spanning from low- to high- level cognition

Role: Co-I

Looxid Labs

Chung (PI)

10/01/19 - 02/28/22

Predicting individual preference and subjective valuation

Goal: To construct neural maps that are predictive of individuals' preference and subjective valuation in decision-making

Role: PI

UNIST

Kwon (PI)

07/01/19 - 12/31/20

**UNIST Basic Science Institute** 

Understanding mechanisms of human cognitive biases using model-based neural and behavioral analyses

Goal: To suggest neurocomputational models that provide common mechanisms underlying cognitive biases in decision-making and learning

Role: Co-I

UNIST

Kim (PI)

04/01/19 - 12/31/20

U-K Research Brand

Development of a platform for motor and cognitive rehabilitation based on neural signals

Goal: To develop quantitative evaluation criteria and rehabilitation training schemes for neurocognitive impairments

Role: Co-I

National Research Foundation of Korea

Chung (PI)

06/01/18 - 05/31/23

2018R1D1A1B0704358

Neurocognitive mechanisms of social influence on decision-making and learning in smokers

Goal: To investigate how social group context affects risky decision-making and learning performances in smokers and health

Role: PI

Past support

NIH/NIDA

Chung, Chiu (PIs)

04/01/17 - 03/31/20

R21DA042274

Neural mechanisms of social influence on risky decisions in cocaine dependence

Goal: To investigate how individuals with cocaine use disorder process and use social influence of different types and sources when making decisions about risky options

Role: PI

National Research Foundation of Korea

Chung (PI)

04/01/18 - 11/30/18

2018M3C1B8013691

Neurocognitive enhancements in context dependent decision-making

Goal: To investigate and develop an adaptive neurocognitive enhancement platform that provides individualized information inducing more economically rational choices

Role: PI

**UNIST** 

Chung (PI)

07/01/18 - 12/31/18

Project for Discovering Outstanding Basic Research Ideas (3<sup>rd</sup>)

Neurocomputational analysis of the effect of cognitive behavioral therapy in treatment naïve depression

Goal: To investigate differential mechanisms on valuation and decision-making in young adults with depression, and to provide quantifiable measures for the treatment effects of cognitive behavioral therapy

Role: PI

### TEACHING AND ADVISING

## Undergraduate training

2018 - present

UNIST. Research Supervisor. Supervised (1) Min Ho Hwang (Dept of Human Factors Engineering, Spring 2018-2019); (2) Yoo Joo Jeong (Dept of Management, Spring 2018-2019); (3) Suyeon Kim (Dept of Human Factors Engineering, Spring 2018-2019); (4) Hee Young Seon (Dept of Human Factors Engineering, Spring 2018-2019); (5) HyungSeok Won (Dept of Computer Engineering, Spring 2018-2019); (6) Dasom Park (Dept of Mechanical and Aerospace Engineering, Spring 2018); (7) Jiwon Park (Dept of Human Factors Engineering, Fall 2019); (8) Sumin Kim (Dept of Biological Sciences, Winter 2018-Fall 2019); (9) Down Jung (Dept of Management, Summer 2019-present); (10) Youngyoon Kim (Dept of Human Factors Engineering, Summer 2019); (11) Minjae Kim (Dept of Human Factors Engineering, Summer 2019)

2013 - 2018

Virginia Tech Carilion Research Institute. Co-mentor to (1) Kaitlin Sine, 2013, Community High School; (2) Jim Pecsok, 2013, College of William & Mary; (3) Lydia Nguyen, 2013-2014, Virginia Tech; (4) Kelly Kadlec, 2014-2018, Virginia Tech

2008

**Korea Advanced Institute of Science and Technology.** Co-mentor to: (1) Jin Ho Kim, Division of Electrical Engineering, Undergraduate Research Program; (2) Bosun Jang, Dept of Physics, Undergraduate Research Program

## Graduate student training

2019 - present Graduate stu

Graduate student direct advisees. UNIST. (1) Min Ho Hwang (BA, UNIST; Spring 2019-present); (2) HeeYoung Seon (BA, UNIST; Spring 2019-present); (3) Suyeon Kim (BA, UNIST; Fall 2019-Spring 2020); (4) Jiwon Park (BA, UNIST, Spring 2020-present)

present)

2018 Master's Dissertation Committee Member. UNIST. MS candidates, Department of

Human Factors Engineering: (1) Jisung Park (advisor Sung-Phil Kim)

2014 Medical student, Virginia Tech Carilion School of Medicine. Co-mentor to: (1)

Sohan Nagrani (BA, Virginia Tech; entered VTCSOM Fall 2011)

2011 - 2018 Virginia Tech Carilion Research Institute. Supervised (1) Vanessa Brown (Dept of

Clinical Psychology); (2) Zhuoya Cui (Translational Biology, Medicine, and Health); (3) Nina Lauharatanahirun (Dept of Psychology); (4) Katie McCurry (Dept of Clinical Psychology); (5) John Wang (Dept of Psychology); (6) Mark Orloff (Translational

Biology, Medicine, and Health)

2008 Korea Advanced Institute of Science and Technology. Supervised (1) Jun-ok Kim

(Dept of Culture Technology); (2) Hoh Kim (Dept of Culture Technology); (3) Irene

Eunyoung Lee (Dept of Culture Technology)

Research interns

10/2020 - present Hyeji Lee (MS, 2020, Seoul National University)

Postdoctoral trainees

10/2020 - present Chongwook Chung (PhD, 2019, KAIST)

01/2019 - 07/2019 Hyeran Jang (PhD, 2013, KAIST)

Course Lectures

9/2020 UNIST. "Advanced topics in Social, Cognitive, and Affective Neuroscience" (Course

number HFE55101)

**UNIST**. "Cognitive Neuroscience" (Course number HFE20601)

9/2019 UNIST. "Special Topics in Human Factors Engineering I: Human Neuroimaging"

(Course number HFE74001)

UNIST. "Cognitive Ergonomics" (Course number HFE20601)

**UNIST.** "Decision making and the Brain" (Course number HFE 41001) 2/2019-2020

UNIST. "Cognition and Decision Making" (Course number HFE 20201. "Human

Factors Fundamentals"; Course Coordinator Ian Oakley)

8/2018 UNIST. "Special Topics in Human Factors Engineering I: Advanced topics in Social,

Cognitive, and Affective Neuroscience" (Course number HFE74001)

**UNIST.** "Cognitive Ergonomics" (Course number HFE20601)

2/2018 UNIST. "Special Topics in Human Factors Engineering I: Decision making and the

Brain" (Course number HFE 41001)

UNIST. "Cognition and Decision Making" (Course number HFE 20201. "Human

Factors Fundamentals"; Course Coordinator Youngshin Kwak)

2/2017 Virginia Tech. "Attention and Attentional Control." (Course number TBMH 5014.

"Fundamentals of Neuroscience"; Course Coordinator Michael Fox & Brooks King-

Casas)

3/2016 Virginia Tech. "Attention and Attentional Control." (Course number TBMH 5014.

"Fundamentals of Neuroscience"; Course Coordinator Michael Fox & Brooks King-

Casas); teaching evaluation 5.00/5

11/2015 Virginia Tech. "Experiment design and model-based fMRI analyses." (Course number

BMES 5984, "Introduction to Functional Magnetic Resonance Imaging"; Course

Coordinator Stephen LaConte).

7/2015 Virginia Tech. "Subjective value and value based decision-making." (Course number

PSYC 4084, "Advanced Social Psychology"; Course Coordinator Meagan O'Neill).

4/2015 Virginia Tech. "Neurobehavioral mechanism of risky decision-making under others'

influence in health and substance dependence." (Course number NEUR 4454,

"Neuroeconomics"; Course Coordinator Sheryl Ball).

# Courses and Workshops

3/2008 Lecturer, Workshop for Practical EEG Research (Experimental designing and

research methods; EEG analyses and source localization), Korea Advanced Institute of

Science and Technology

2007 - 2010	<b>Teaching Assistant,</b> APCTP-KAIST School for Brain Dynamics, Korea Advanced Institute of Science and Technology
2006 - 2007	<b>Teaching Assistant,</b> Introduction to Bioengineering (BiS102), Korea Advanced Institute of Science and Technology
6/2006 - 2/2007	<b>Co-mentor</b> to: (1) Sungyo Kim, (2) Sang-woo Kim, (3) Hyunsang Park (Gyeonggi Science High School for the Gifted), Korea Science Academy Research and Education (R&E), Funded by Korea Science and Engineering Foundation (KOSEF2006-01-035)
INVITED TALKS	

INVITED TALKS	
08/2020	Korean Psychological Association, Virtual conference "Crisis on Earth: Psychological
	Approaches to Disasters."
07/2019	Cognitive Neuroscience Symposium, IBS Center for Neuroimaging Research, Suwon,
	South Korea
05/2019	Seoul National University, South Korea
02/2019	Korean Society for Cognitive & Biological Psychology, South Korea
12/2018	Graduate School of Culture Technology, KAIST, Daejeon, South Korea;
	Department of Bio and Brain Engineering, KAIST, Daejeon, South Korea;
	2018 Annual symposium of Korean Society for Computational Neuroscience, Korean
	Society for Computational Neuroscience, South Korea
07/2018	Korea Basic Science Institute, Ochang, Cheongju, South Korea
03/2018	Korea University, Seoul, South Korea
03/2018	Seoul National University, Seoul, South Korea
02/2018	2018 Computational Neuroscience Winter School, Asia-pacific center for theoretical
	physics (ATCTP), South Korea
09/2017	UNIST, Ulsan, South Korea
04/2017	UC Davis, CA, USA
03/2017	DGIST, Daegu, South Korea
03/2016	NYU Shanghai, Shanghai, China
03/2016	New York University, NY, USA
01/2016	Frontiers of BrainHealth Lunch Lectures, Center for BrainHealth, University of Texas
	at Dallas, USA
12/2014	2014 Young Computational Neuroscientist Workshop, Asia-pacific center for

theoretical physics (APCTP) & KAIST, South Korea

Biological Psychology, Virginia Tech, USA

Institute for Basic Science, South Korea

11/2014 12/2013

07/2013	Institut des Sciences Cognitives, France
02/2012	KAIST, South Korea
07/2011	Virginia Tech – Virginia Tech Carilion Research Institute, USA

## **PATENTS**

2011	Kyongsik Yun, Jaeseung Jeong, <u>Dongil Chung</u> , "EEG analysis device, EEG device, brain-brain interface device and lie-detector using the same, and EEG analysis method", patent (10-1032924) Korea.
2013	Jaeseung Jeong, <u>Dongil Chung</u> , Kwangyeol Baek, Se-woong Lim, "Apparatus for measuring 3D display-induced visual discomfort, Apparatus for extracting 3D visual discomfort-inducing components automatically, and Method thereof", patent (10-1267637) Korea.
2018	Dongil Chung, Sung-Phil Kim, Chung Ho Lee, Minho Hwang, "Apparatus for

Dongil Chung, Sung-Phil Kim, Chung Ho Lee, Minho Hwang, "Apparatus for predicting choices using EEG, providing context information to induce neurocognitive enhancement, and method thereof", patent pending (10-2018-0132365) Korea.

## CONFERENCE PAPERS AND PRESENTATIONS

<u>Dongil Chung</u>. Decision-making under uncertainty in smokers, depressed individuals, and healthy controls, *Korea Cognitive and Biological Psychology*, Online conference, August 27-28, 2020, Oral presentation

Yi Luo, Anastasia Shuster, <u>Dongil Chung</u>, Madeline O'Brien, Matt Heflin, Vincenzo Fiore, Ofer Perl, Kaustubh Kulkarni, Soojung Na, Xiaosi Gu. Dissociable social perception and altruistic choices during the first wave of COVID-19 in the United States, *Social BRIDGES: An online conference*, University of the Bundeswehr, Munich, July 22-24, 2020, Video oral presentation

Link: https://www.youtube.com/watch?v=Sdw1sx-J8fg

<u>Dongil Chung</u>, George Christopoulos, Richard De La Garza, Brooks King-Casas, Pearl H. Chiu. (2020) Social influences on risky choices in cocaine use disorder, *Biological Psychiatry* 87(9), S22-S23

- Yeonju Shin,<sup>†</sup> HeeYoung Seon,<sup>†</sup> Yun Kyoung Shin, <u>Dongil Chung</u>,<sup>\*</sup> Oh-Sang Kwon<sup>\*</sup>. Humans over-expect from the future chances in finite sequential decision problems, *Society for Neuroscience*, Chicago, IL, USA, October 19-23, 2019, Poster presentation
- Jihyun Kim, Junsuk Kim, Jiwon Yeon, Jang-Yeon Park, <u>Dongil Chung</u>, Sung-Phil Kim. Sub-cortical activity encodes tactile hardness information during active object exploration, *Organization for Human Brain Mapping*, Rome, Italy June 9-13, 2019, Poster presentation

- <u>Dongil Chung</u>, Hyeran Jang, HeeYoung Seon, HyungSeok Won. Shared variance between observational learning and decision-making under uncertainty, *The Social & Affective Neuroscience Society 2019 Annual Meeting*, Miami, USA May 2-4, 2019, Poster presentation
- Mark A. Orloff, <u>Dongil Chung</u>, Brennan Delattre, Jacob Lee, Brooks King-Casas, Pearl H. Chiu. Having agency in acquiring social information increases social influence, *International Convention of Psychological Science*, Paris, France March 7-9, 2019, Poster presentation
- HeeYoung Seon, Min Ho Hwang, Yoo Joo Jeong, Suyeon Kim, Jiwon Park, HyungSeok Won, <u>Dongil Chung</u>. A mode-based EEG study of decision-making under uncertainty, *Korea Cognitive and Biological Psychology*, PyeongChang, Gangwon, South Korea February 14-15, 2019, Poster presentation
- <u>Dongil Chung</u>, HyungSeok Won, Yoo Joo Jeong, Dasom Park, HeeYoung Seon. Individual differences and impacts of psychopathological symptoms in observational reward learning, *Asia-Pacific Signal and Information Processing Association Annual Summit and Conference*, Honolulu, Hawaii, USA November 12-15, 2018, Oral presentation
- Mark A. Orloff, <u>Dongil Chung</u>, Brennan Delattre, Jacob Lee, Brooks King-Casas, Pearl H. Chiu. Having agency in acquiring social information increases social influence, *Organization for Human Brain Mapping*, Singapore, Singapore June 17-21, 2018, Poster presentation
- Mark A. Orloff, <u>Dongil Chung</u>, Xiaosi Gu, Zhixian Gao, Shuai Xu, Xingchao Wang, Brooks King-Casas, Pearl H. Chiu. Dissociating the roles of insula and dorsal anterior cingulate cortex in risk evaluation, *Organization for Human Brain Mapping*, Vancouver, Canada June 25-29, 2017, Poster presentation
- <u>Dongil Chung</u>, Mark A. Orloff, Xiaosi Gu, Zhixian Gao, Guiding Song, Chandana Tatineni, Xingchao Wang, Shuai Xu, Brooks King-Casas, Pearl H. Chiu. Necessary contribution of the insular cortex to risky decision-making under social influence, *The Multidisciplinary Conference on Reinforcement Learning and Decision Making*, Ann Arbor, MI, USA June 11-14, 2017, Poster presentation
- Mark A. Orloff, <u>Dongil Chung</u>, Brooks King-Casas, Pearl H. Chiu. Influence from safe others in adolescence is associated with substance abstinence, *Virginia-Nordic Precision Neuroscience*, Roanoke, Virginia, USA October 5-7, 2016, Poster presentation
- <u>Dongil Chung</u>, Brooks King-Casas, George I. Christopoulos, Thomas Newton, Richard De La Garza, Pearl H. Chiu. Altered neurobehavioral mechanisms of risky decision-making under social influence in cocaine addicts, *Reprogramming the Brain to Health: Computational Psychiatry and Neurology*, Dallas, TX, USA April 14, 2016, Poster presentation

- <u>Dongil Chung</u>, Richard De La Garza, Thomas Newton, Katie McCurry, Brooks King-Casas, Pearl Chiu. Neurobehavioral evidence for cognitive enhancement in cocaine dependent individuals, *Organization for Human Brain Mapping*, Honolulu, HI, USA June 14-18, 2015, Poster presentation
- <u>Dongil Chung</u>, George I. Christopoulos, Brooks King-Casas, Sheryl B. Ball, Pearl H. Chiu. Social signals of safety and risk confer utility and have asymmetric effects on observers' choices, 5<sup>th</sup> Annual Interdisciplinary Symposium on Decision Neuroscience, Boston, MA, USA May 15-16, 2015, Poster presentation & invited for the Data Blitz
- Sohan Nagrani, <u>Dongil Chung</u>, Pearl Chiu. A study of risky decision making in major depressive disorder, Society for Judgment and Decision Making, Long Beach, CA, USA November 21-24, 2014, Poster presentation
- <u>Dongil Chung</u>, George I. Christopoulos, Brooks King-Casas, Sheryl B. Ball, Pearl H. Chiu. Other-conferred utility explains asymmetric alignment with signals of safety and risk, *2014 American meetings of the Economic Science Association*, Fort Lauderdale, FL, USA, October 16-18, 2014, Oral presentation
- <u>Dongil Chung</u>, Jason Aimone, Brooks King-Casas, Pearl Chiu. Neural substrates of trust and generosity under imposition, 2014 American meetings of the Economic Science Association, Fort Lauderdale, FL, USA, October 16-18, 2014, Oral presentation
- <u>Dongil Chung</u>, Jason Aimone, Lydia Nguyen, Allison McKinnon, Andre Plate, Brooks King-Casas, Pearl Chiu. Neural substrates of trust and diminishing motivations of generosity, *Organization for Human Brain Mapping*, Hamburg, Germany, June 8-12, 2014, Poster presentation
- <u>Dongil Chung</u>, George Christopoulos, Thomas Newton, Richard De La Garza, Brooks King-Casas, Pearl Chiu. Cocaine addicts show increased susceptibility to social influence during risky decision making, *Society for Neuroscience*, San Diego, CA, USA, November 9-13, 2013, Poster presentation
- <u>Dongil Chung</u>, Xiaosi Gu, Zhixian Gao, Shuai Xu, Xingchao Wang, Pearl Chiu. Causal roles of dorsal anterior cingulate and insula on peer-influenced decision making under risk, *Organization for Human Brain Mapping*, Seattle, USA, June 16-20, 2013, Poster presentation
- <u>Dongil Chung</u>, George Christopoulos, Brooks King-Casas, Pearl Chiu. The neural basis of social influence on risky decision making, 25<sup>th</sup> Annual Symposium of the Central Virginia Chapter of the Society for Neuroscience, Roanoke, VA, USA, March 7-8, 2013, Poster presentation
- Dongil Chung, George Christopoulos, Katie McCurry, Thomas Newton, Richard De La Garza, Pearl Chiu.

- Social influence on risky decision making affects both risk preference and risk perception: neural substrates of peer influence in cocaine dependence, *Society for Neuroscience*, New Orleans, LA, USA, October 13-17, 2012, Poster presentation
- <u>Dongil Chung</u>, Jaeseung Jeong. Individual Gain/Loss Attitude, Conditional Cooperation, and Random Shifting in a Public Goods Game, *Organization for Computational Neuroscience*, Atlanta/Decatur, GA, USA, July 21-26, 2012, Poster presentation
- <u>Dongil Chung</u>, George Christopoulos, Katie McCurry, Thomas Newton, Richard De La Garza, Pearl Chiu Neurobehavioral substrates of peer influence on risky preferences of cocaine addicts, *Organization for Human Brain Mapping*, Beijing, China, June 10-14, 2012, Poster presentation
- <u>Dongil Chung</u>, Kyongsik Yun, Jaeseung Jeong. Neural Predictors and Spatiotemporal Dynamics of Free-riding, Society for Neuroeconomics, Evanston, Illinois, USA, October 15-17, 2010, Oral presentation
- Kyongsik Yun, <u>Dongil Chung</u>, Jaeseung Jeong. Simultaneous EEG Hyperscanning during Linked Social Interactions of the Ultimatum Game, *Organization for Human Brain Mapping*, Barcelona, Spain, June 6-10, 2010, Poster presentation
- Hyang Woon Lee, Songe Kim, <u>Dongil Chung</u>, Jaeseung Jeong, Byung Gon Kim, Jae Sung Lee, Woo Suk Tae, Seung Bong Hong, Phase-locked early gamma oscillations in human visual cortex: direct recording from subdural electrodes, *Korean Human Brain Mapping*., Seoul, South Korea, November 7, 2008, Poster presentation
- <u>Dongil Chung</u>, Jaeseung Jeong. Agent-based Network Model for the Public Goods Game, *Society for Neuroeconomics*. Park City, Utah, USA, September 25-28, 2008, Poster presentation
- <u>Dongil Chung</u>, Kyongsik Yun, Jaeseung Jeong. "Neural Substrates of Free-riding and Cooperation During the Standard Public Goods Game", *Society for Neuroeconomics*. Park City, Utah, USA, September 25-28, 2008, Poster presentation
- <u>Dongil Chung</u>, Kyongsik Yun, Jaeseung Jeong. Neural Mechanisms of Free-riding and Cooperation in Public Goods game: an EEG Hyperscanning Study, *International Conference of Cognitive Science*. Seoul. Korea, July 27 29, 2008, Oral presentation
- Kyongsik Yun, <u>Dongil Chung</u>, Jaeseung Jeong. Emotional Interactions in Human Decision-Making using EEG Hyperscanning, *International Conference of Cognitive Science*. Seoul. Korea, July 27 29, 2008, Oral presentation

- Jun-ok Kim, Moo Kyoung Han, <u>Dongil Chung</u>, Yeojeong Choi, Jaeseung Jeong. Does Program Music Induce Visual Imagery Better Than Absolute Music? - An EEG Study, *The 10th International Conference on Music Perception and Cognition*, Sapporo, Japan, August 25-29, 2008
- Charles-Fransois Vincent Latchoumane, <u>Dongil Chung</u>, Seongkyun Kim, Jaeseung Jeong. Segmentation and Characterization of EEG During Mental tasks using Dynamical Nonstationarity, International conference on Computational Intelligence in Medicine and Healthcare, Sherwell Centre, University of Plymouth, Plymouth, England, July 25-27, 2007.
- <u>Dongil Chung</u>, Sumin Chang, Jaewon Lee, Sungyo Kim, Sangwoo Kim, Hyunsang Park, Shinho Ryu, Jaeseung Jeong. EEG Source Localization Analysis for Local-Global Visual Processing Using Sloreta, *International IEEE EMBS conference on Neural Engineering*, The Kohala Coast, Hawaii, USA, May 2 – 5, 2007, Poster presentation
- Hyeran Jang, Sumin Chang, Mookyoung Han, Kwangyeol Baek, <u>Dongil Chung</u>, Jaeseung Jeong. Analysis of Fear Memory Signals in the Rat Amygdala and Thalamus, *International IEEE EMBS conference on Neural Engineering*, The Kohala Coast, Hawaii, USA, May 2 5, 2007, Poster presentation
- Kyongsik Yun, <u>Dongil Chung</u>, Seungyeon Kim, Hansol Kim, Koeun Lim, Sumin Chang, Jaeseung Jeong. Electrophysiological Correlates of Faireness in Human Decision-Making, *Organization for Human Brain Mapping*. Chicago, Illinois, USA, June 10 – 14, 2007, Poster presentation
- <u>Dongil Chung</u>, Seungyeon Kim, Jaewon Lee, Amir Raz, Jaeseung Jeong. Working memory associated differential inhibitions describe categorized negative priming effects, *Computational and Systems Neuroscience*. Salt Lake City, Utah, USA, February 22 25, 2007, Poster presentation
- <u>Dongil Chung</u>, Jaewon Lee, Amir Raz, Jaeseung Jeong. An integrative time-delayed network model for negative priming effects during Stroop tasks, *Organization for Computational Neurosciences*. Edinburgh, UK, July 16 18, 2006, Poster presentation

#### AWARDS AND HONORS

2014	Selected attendee for Perspectives and Future Directions in Social Neuroscience
	supported by Volkswagen Foundation and Von Behring-Röntgen-Stiftung
2014	Selected attendee for Professional Development Workshop (ProDeW) supported by
	Korean-American Scientist and Engineers Association (KSEA)
2012	Best paper award, Dept. of Bio and Brain Engineering, KAIST
2009	Lab safety idea contest (The first prize), KAIST
2008	Future medical idea contest (The bronze prize), KAIST IT for Information Technology

Convergence

2008 Lab safety idea contest, KAIST

2008 Selected Discussant for OIST decision making workshop (October 15-19, 2008)

supported by Okinawa Institute of Science and Technology

2006 Best paper award, Dept. of Biosystems, KAIST

## PROFESSIONAL MEMBERSHIPS AND SERVICE

Member: Society for Neuroscience; Society for Neuroeconomics; Organization for Human Brain

Mapping; Association of Korean Neuroscientists; Economic Science Association; Social and Affective Neuroscience Society; Cognitive Neuroscience Society; Korean Society for Computational Neuroscience; Korean Society for Cognitive and Biological

Psychology

**Review Editor:** Frontiers in Human Neuroscience | Human Neuroscience Archive

Frontiers in Human Neuroscience | Brain-Computer Interfaces

**Associate Editor:** Frontiers in Psychiatry | Social Cognition

**Ad hoc Reviewer:** Biological Psychiatry: Cognitive Neuroscience & Neuroimaging; Cerebral Cortex;

Cognitive Neurodynamics; Economic Modeling; Experimental Brain Research; eLife; European Journal of Neuroscience; Frontiers in Human Neuroscience; Frontiers in Psychology; JAMA Psychiatry; Journal of Behavioral Decision Making; Journal of Experimental Psychology: General; Journal of Neurology, Neurosurgery & Psychiatry; Journal of Neuroscience; Journal of Psychiatric Research; Journal of Research on

Adolescence; Nature Communications; Neuropsychologia;

Neuropsychopharmacology; PLoS ONE; Schizophrenia Research; Scientific Reports;

Social Cognitive and Affective Neuroscience