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EDUCATION

M.S, Applied Mathematics, Konkuk University, Aug 2018 [Advisor: Yangjin Kim] B.S, Konkuk University, Seoul, Republic of Korea, Feb, 2017

EMPLOYMENT

- 1. Research Assistant [Mar, 2022 Dec, 2022] Seoul Science High School R&E Program, Korea Ministry of Education, Republic of Korea, Konkuk University
- 2. Research Assistant [Mar, 2021 Dec, 2021] Seoul Science High School R&E Program, Korea Ministry of Education, Republic of Korea, Konkuk University
- 3. Research Assistant [Mar, 2020 Dec, 2020] Seoul Science High School R&E Program, Korea Ministry of Education, Republic of Korea, Konkuk University
- 4. Teaching Assistant [Sep, 2019 Dec, 2019] Calculus, Konkuk University, Mathematics, South Korea
- 5. Teaching Assistant [Mar, 2017 Dec, 2018] Calculus, Konkuk University, Mathematics, South Korea
- 6. Teaching Assistant [Jul 17-19, 2018], Teacher Education Program, Korea Foundation for the Advancement of Science & Creativity, Republic of Korea, Konkuk University
- 7. Teaching Assistant [Nov 16-17, 2017] Teacher Education Program, Korea Foundation for the Advancement of Science & Creativity, Republic of Korea, Konkuk University

PUBLICATIONS

Published/accepted

1. Yangjin Kim, **Junho Lee**, Chaeyoung Lee, and Sean Lawler, *Role of senescent tumor cells in building a cytokine shield in the tumor microenvironment: mathematical modeling*, J Math Biol, 86(1), 14, Dec 2022. [https://doi.org/10.1007/s00285-022-01850-z] (Invited paper for the Special Issue Honouring Avner Friedman)

- 2. **Junho Lee**, Jin Su Kim and Yangjin Kim[†], Atorvastatin-mediated rescue of cancer-related cognitive changes in combined anticancer therapies, PLoS Comp Biol, 17(10): e1009457, Oct 20, 2021. [https://doi.org/10.1371/journal.pcbi.1009457] [IF=4.42; top 10%].
- 3. **Junho Lee**, Donggu Lee, Sean Lawler, Yangjin Kim[†], Role of neutrophil extracellular traps in regulation of lung cancer invasion and metastasis: Structural Insights from a Computational Model, PLoS Comp Biol, 17(2): e1008257, Feb 2021, https://doi.org/10.1371/journal.pcbi.1008257 [IF=4.42; top 10%].
- 4. Yangjin Kim, **Junho Lee**, Donggu Lee and Hans G. Othmer[†], Synergistic Effects of Bortezomib-OV Therapy and Anti-Invasive Strategies in Glioblastoma: A Mathematical Model, Cancers, 11(2), 215, Feb 13, 2019. [doi:10.3390/cancers11020215] [IF=6.1]
- 5. Yangjin Kim, Donggu Lee, **Junho Lee**, Seongwon Lee, Sean Lawler, *Role of tumor-associated neutrophils in regulation of tumor growth in lung cancer development: A mathematical model*, PLoS One, 14(1): e0211041, Jan 28, 2019. [IF=2.74]
- 6. Yangjin Kim, Wanho Lee, Hyejin Jeon, Sookkyung Lim, Soyeon Roh, Donggu Lee, Junho Lee, and Sean Lawler, The role of microenvironment in regulation of cell infiltration in glioblastoma, Springer volume 'Cell Movement: Modeling and Applications', Editors: Stolarska, Magdalena, Tarfulea, Nicoleta E, 27-60, 2018. ISBN 978-3-319-96842-1
- 7. Shinji Nakaoka, Sota Kuwahara, Changhyeong Lee, Hyejin Jeon, **Junho Lee**, Yasuhiro Takeuchi, and Yangjin Kim, *Chronic inflammation in the epidermis: A mathematical model*, Appl. Sci. 6(9), 252, Sep 2016 doi:10.3390/app6090252. [IF=1.726]

Submitted/in revision:

In preparation:

- 1. Yangjin Kim[†], Donggu Lee, **Junho Lee**, and Sean Lawler, Role of tumor-associated neutrophils and neutrophil elastase in regulation of lung cancer growth and growth patterns, in revision, 2021.
- 2. Yoshihiro Otani*, Yangjin Kim*, Junho Lee, Ji Young Yoo, Samantha Chao, Jessica Swanner, Toshihiko Shimizu, Cole T Lewis, Jin Muk Kang, Sara A Murphy, Josue Pineda, Kimberly Rivera Caraballo, Bridgitte E Palacios, Bangxing Hong, E Antonio Chiocca, Hiroshi Nakashima, Sean E Lawler, Yeshavanth Banasavadi-Siddegowda, John Heiss, Yuanqing Yan, Abhinav K Jain, Arif O Harmanci, Scott D. Olson, Guangsheng Pei, Zhongming Zhao, Avner Friedman†, Balveen Kaur†, Activated NOTCH induced monocyte recruitment suppresses antitumor immunity with virotherapy, Nature Immunology (IF: 20), 2021, submitted.

Conference

Conferences/Workshops:

- 1. 2022 ECMTB-SMB joint Conference, Heidelberg, Germany [Sep 19-23, 2022]
- 2. (Talk) "Role of senescent tumor cell in building a cytokine shield in tumor microenvironment: mathematical models", 2022 Annual Conference of KSMB, Venezia Hotel & Resort, Yeosu, Republic of Korea [June 24-26, 2022]
- 3. 2022 KSIAM Spring Conference, IBS, Daejeon, Republic of Korea [May 27-29, 2022]
- 4. (Talk) "Atorvastatin-mediated rescue of chemo-brain in combined anticancer therapies', 2021 KSIAM Annual Meeting, Venyn Busan BEXCO (Online & Offline Hybrid, Busan, Republic of Korea [Dec 2-5, 2021]

- 5. (Talk) "Atorvastatin-mediated rescue of cancer-related cognitive changes in combined anticancer therapies", 2021 KSMB Annual Meeting, Online [August 26-28, 2021]
- 6. (Talk) "Role of neutrophil extracellular traps in regulation of lung cancer invasion: a Computational Model", 2021 KSIAM Annual Meeting, Gangneung TopsTen Hotel, Gangneung, Republic of Korea [June 25-27, 2021]
- 7. (Talk) Role of neutrophil extracellular traps in regulation of lung cancer invasion: a Computational Model, 2021 SMB Annual Meeting, Online [June 13-17, 2021]
- 8. (Poster) "Synergetic Effects of Bortezomib-OV Therapy and Anti-Invasive Strategies in Glioblastoma: A Mathematical Model", 2020 SMB Virtual Annual Meeting, [Aug 17, 2020]
- 9. (Talk) "Role of tumor-associated neutrophils and NE in regulation of lung cancer growth and growth patterns", 2019 KSIAM Annual Meeting, Venezia Hotel & Resort, Yeosu, Republic of Korea [Nov 8-10, 2019]
- (Talk) "Synergistic Effects of Bortezomib-OV Therapy and Anti-Invasive Strategies in Glioblastoma: A Mathematical Model", The 7th China-India-Japan-Korea International Conference on Mathematical Biology, University of Science and Technology Beijing, Beijing, China [August 23-27, 2019]
- 11. (Poster) "Synergistic Effects of Bortezomib-OV Therapy and Anti-Invasive Strategies in Glioblastoma: A Mathematical Model", 2019 Annual Conference of KSMB, Seogwipo KAL Hotel, Jeju, Republic of Korea [June 20-22, 2019]
- 12. (Talk) "Synergistic Effects of Bortezomib-OV Therapy and Anti-Invasive Strategies in Glioblastoma: A Mathematical Model", 2019 The 14th SIAM East Asian Section Conference, Wuhan Univerity, Wuhan, China [June 14-16, 2019]
- 13. (Poster) "Synergistic Effects of Bortezomib-OV Therapy and Anti-Invasive Strategies in Glioblastoma: A Mathematical Model", 2019 KSIAM spring meeting, Yonsei Univerity, Seoul, Republic of Korea [May 17-18, 2019]
- 14. (Talk) "Synergistic Effects of Bortezomib-OV Therapy and Anti-Invasive Strategies in Glioblastoma: A Mathematical Model", 2019 A3 workshop on Mathematical Life Science, Peking University, Beijing, China [May 10-12, 2019]
- 15. (Poster) "Synergetic effect of bortezomib on oncolytic virus: signaling pathways", 2018 KSIAM Annual Meeting, Jeju Ramada Plaza Hotel, Jeju, Republic of Korea [November 02-04, 2018]
- 16. (Poster) "Synergetic effect of bortezomib on oncolytic virus: signaling pathways", The 5th joint workshop of A3 Foresight Program, Lakai Sandpine Hotel, Gangneung, S. Korea [October 18-20, 2018 (18th)]
- 17. (Poster) "Synergetic effect of bortezomib on oncolytic virus: signaling pathways", 2018 KSMB conference, Haeundae Grand Hotel, Busan, Republic of Korea [June 28-30, 2018]
- 18. (Poster) "Synergetic effect of bortezomib on oncolytic virus: signaling pathways", 2018 KSIAM Spring conference, KAIST, Deajeon, Republic of Korea [May 25-26, 2018]
- 19. (Poster) "Synergetic effect of bortezomib on oncolytic virus: signaling pathways", 2018 International workshop on mathematical biology, Costabella tropical beach hotel buyoung, Mactan island Cebu, Philippines [January 07-10, 2018]
- 20. 2017 KSIAM Annual Meeting, Haeundae Grand Hotel, Busan, Republic of Korea [November 03-05, 2017]
- 21. (Poster) "Bacteria competition in the epidermis: A mathematical model", 2017 KSIAM Spring conference, Seoul National University, Seoul, Republic of Korea [June 23-24, 2017]

- 22. 2016 KSIAM Annual Meeting, Seogwipo KAL Hotel, Jeju, Republic of Korea [November 11-13, 2016]
- 23. 2016 Summer workshop and Intensive course in bio-medicine, Konkuk University, Seoul, Republic of Korea [August 22-26, 2016]
- 24. 2016 KSMB conference, Jeju Ramada Hamdeok, Jeju, Republic of Korea [June 16-18, 2016 (18th)]

GRANTS

1. Research Grant Award entitled "Development of Hybrid Mathematical Modeling and Anticancer Treatment Strategies for the Mechanism of Cognitive Impairment During Chemotherapy", Basic Science Re- search Program (Next generation), National Research Foundation of Korea, Ministry of Education, Republic of Korea [June, 2020; 2 years] (40,000,000 KRW)

AWARDS

- 1. KSIAM conference poster award "Synergetic effect of bortezomib on oncolytic virus: signaling pathways", 2018 KSIAM Spring conference Poster session [May 25-26, 2018]
- 2. KSMB conference poster award "Synergistic Effects of Bortezomib-OV Therapy and Anti-Invasive Strategies in Glioblastoma: A Mathematical Model", 2019 Annual Conference of KSMB Poster session [June 20-22, 2019]