CURRICULUM VITAE for CHEOL-HEUI YUN

PERSONAL:

Place of Birth: Citizenship: Correspondence Address: Gwang-ju, Republic of Korea Republic of Korea Department of Agricultural Biotechnology College of Agriculture and Life Sciences Seoul National University Rm. 4222, Bldg. 200 Gwanangno 1, Gwanak-gu Seoul 08826, Republic of Korea

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BIOGRAPHY

Professor Cheol-Heui YUN grew up in Gwang-ju, a southwest of Republic of Korea. He was educated at the Chonnam National University for B. Sc. and the Seoul National University for his M. Sc. in the area of Animal Nutrition. Professor YUN completed his Ph. D. at the University of Saskatchewan, Canada in the area of immune modulation and mucosal immunology. Then, he pursued his professional career at leading research institutes in different region of the world including International Vaccine Institute (IVI, Seoul, Korea), United States Department of

Agriculture (USDA, Greenbelt, MD, USA), National Institutes of Health (NIH, Bethesda, MD, USA) and Gothenburg University (Gothernburg, Sweden) where he undertook research related to stressors, vaccine, infection and host protective immunity. He published over 230 SCIE papers to date and has been the recipient of prestigious awards, including Seoul National University Excellence in Teaching Award (2018), Distinguished teaching award by Kukdam Foundation (2010), and official commendation for from the cabinet minister of the Ministry of Science and Technology, Korea (2007).

He was invited as a professor at Seoul National University since 2006, and currently serves as a co Editor-in-Chief of Animal Bioscience, and editors of a number of societies including Frontiers in Immunology (Molecular Innate Immunity Section, and Cytokines and Soluble Mediators in Immunity Section), as an Ethics editor for the science editing, and Korean Journal of Women Health Nursing. On the other hand, he is acting as a Chair of Committee on Publication Ethics at the Korean Council of Science Editors (KCSE) and Secretary General of the Council of Asian Science Editors (CASE).

POST-SECONDARY EDUCATION:

1991-1997, M. Sc./Ph. D.; Immunology, University of Saskatchewan, Saskatoon, Saskatchewan, Canada **Supervisor:** Professor Bernard Laarveld **Thesis title:** Immunomodulating effect of (1, 3) (1, 4) β-glucan, derived from oats, in mice infected with *Eimeria vermiformis*.

1989-1991, M. Sc.; Animal Nutrition, (Department of Animal Science and Technology), Seoul National University, Seoul, Korea **Supervisor:** Dr. In K. Han, Professor Emeritus **Thesis title:** Effects of lysine and sodium levels on the growth performance, acid-base balance and lysine-arginine antagonism in broiler chicks.

1982-1989, B. Sc.; (Department of Animal Science and Technology), Chonnam National University, Gwang-ju, Korea

CAREER AFTER POST-SECONDARY EDUCATION:

2006 - Current: Seoul National University as Assistant / Associate / Full Professor.

2004 - 2006: International Vaccine Institute as a Research Scientist leading a Cellular Immunology Section.

Research area: Vaccine related immunological monitoring; Study enteric infection and immunity based upon Cellular Immunology (dendritic and memory cells).

2002 - 2004: Department of Medical Microbiology and Immunology, Gothenburg University, Gothenburg, Sweden as a visiting research scientist, sent by International Vaccine Institute. **Research area:** Natural killer cell activity and migration of cells across the transendothelial barrier; Mucosal response to vaccination with *Salmonella*.

1999 - 2001: Biotherapy Section, Laboratory of Molecular Biology, National Cancer Institute, NIH in Bethesda, Maryland as a postdoctoral fellow.

Research area: Vaccine development using *Pseudomonas exotoxin* A (PEA) as a delivery system. Cellular behavior of PEA using mammalian cell expression system.

1997 - 1999: USDA in Beltsville, Maryland as a postdoctoral fellow. **Research area:** Mucosal immunity and vaccine development in avian coccidiosis.

EDITORIAL APPOINTMENTS

2020 - Current: Co Editor-in-Chief of the Animal Bioscience (https://www.animbiosci.org/)

2020 - Current: Ethics editor of the science editing (https://www.escienceediting.org/)

2020 - Current: Ethics editor of the Korean Journal of Women Health Nursing (<u>https://kjwhn.org/about/editorial.php</u>).

2019 - Current: Associate Editor of the Frontiers in Immunology (Molecular Innate Immunity) (<u>https://www.frontiersin.org/journals/immunology/sections/molecular-innate-immunity#editorial-board</u>)

2017 - Current: Review Editor of the Frontiers in Immunology (Cytokines and Soluble Mediators in Immunity) (<u>https://www.frontiersin.org/journals/immunology/sections/cytokines-and-soluble-mediators-in-immunity#editorial-board</u>)

2011 - Current: Associate editor of the Journal of Biomaterials and Tissue Engineering (<u>http://www.aspbs.com/jbt/</u>)

2011 - Current: Review Editor of the Frontiers in Immunology (Molecular Innate Immunity) (<u>https://www.frontiersin.org/journals/immunology/sections/molecular-innate-immunity#editorial-board</u>)

2011 - 2015: Editor of the World Journal of Immunology (http://www.wjgnet.com/)

2007 - 2018: Editor of the Korean Journal of Microbiology (<u>http://www.msk.or.kr/msk/eng/publications/kjm.jsp</u>)

2006 - 2019: Deputy Editor-in-Chief and Associate Editor of the Asian-Australasian Journal of Animal Sciences (<u>http://www.ajas.info/</u>)

2009 - 2013: Editor of the Korean Society of Animal Science and Technology (<u>http://www.ksast.org/</u>)

2010 - 2011: Associate-Editor for the Journal of Microbiology (<u>http://www.springer.com/life+sciences/microbiology/journal/12275</u>)

2009 - 2010: Editor of the Journal of Microbiology

ROLES AT ACADEMIC SOCIETIES

2020 - Current: Secretary General of Council of Asian Science Editors (<u>https://www.asianeditor.org/</u>).

2017 - Current: Chair of Committee on Publication Ethics, Korean Council of Science Editors (<u>https://www.kcse.org/</u>).

2012 - 2018: Vice-president/President/Auditor of the Korean Dendritic Cell Academic Society.

2012: 12th International Symposium on Dendritic Cells; Served as a Chair of Social Program Committee (Organizing Committee), October 7-11, 2012, Convention Center EXCO, Daegu, Korea (Theme: New paradigm of DC Science and Application).

2010 - Current: Associate member of the Korean Academy of Science and Technology.

2015 - 2017: Member of Information and Publication, Korean Council of Science Editors (https://www.kcse.org/).

2011 - 2012: Chief of International Affairs for the Korean Society of Animal Science and Technology.

2011 - 2012: Chief of International cooperation for the Korean Association of Immunologists.

2008 - 2009: Served as an auditor for the Korean Association of Immunologists.

2008 - 2009: Served as a member of scientific committee for the Korean Association of Immunologists.

2005 - 2007: Served as a chief of committee for the Korean Association of Immunologists.

ROLES AT SEOUL NATIONAL UNIVERSITY

2020.03.01 – current: Chair at Institute of Environmental Protection and Safety, Seoul National University.

2009 – 2015; 2017.04.07 – current: Serve as a committee member of Institute of Laboratory Animal Resources, Seoul National University.

2017.03.01 - 2019.02.28: Chair at Department of Food and Animal Biotechnology, CALS, Seoul National University.

2017.03.01 - 2019.02.28: a member of advisory board at NICEM, CALS, Seoul National University.

2015.01 - 2016.01: Serve as a Chair at Department of Biomodulation, Seoul National University.

2010.09 - 2011: Serve as a director of the SNUIACUC (Seoul National University Institutional Animal Care and Use Committee), Seoul National University.

2009 - 2011: Served as an advisory professor for 'The Daehak Shinmoon' (Seoul National University newspaper), Seoul National University.

2008.04 - 2012.04: Served as a committee member of SNUIACUC (Seoul National University Institutional Animal Care and Use Committee), Seoul National University.

2006 - 2010: Senior Chief of Division, Institute of Animal Science and Technology, Research Institute for Agriculture and Life Sciences, Seoul National University.

MEMBERSHIPS IN SOCIETIES:

KAI (The Korean Association of Immunobiologists)
MSK (Microbiological Society of Korea)
KSMCB (Korean Society for Molecular and Cellular Biology)
KSAS (Korean Society of Animal Sciences and Technology)
AB (Animal Bioscience; formally AJAS, Asian-Australasian Journal of Animal Science)
AAI (American Association of Immunologists)
SLB (Society for Leukocyte Biology)
AIRG (Avian Immunology Research Group)

AWARDS AT CONFERENCES AND MEETINGS:

Annual Meeting of the Microbiological Society of Korea (MSK 2020 e-Conference), Oct 7-8, 2020.

[Best poster award] Inactivated *Corynebactrium glutamicum* administered via oral route enhanced memory T cell responses in mouse vaccinated with inactivated *Escherichia coli* K99 (Narae Kim, Dobin Ju, Yang-Su Kim, Han Wool Kim, **Cheol-Heui Yun**).

KAI International Meeting 2019, Sejong University Convention Center, Seoul, Korea. Oct. 29-Nov. 1, 2019.

[Best poster award] STAT1 restrains peripheral naïve CD8⁺ T cell responsiveness to homeostatic cytokines by regulating mTORC1 signaling (Yoon-Chul Kye, **Cheol-Heui Yun**^{*}, and Jae-Ho Cho^{*})

16th AAAP Animal Congress 2014. Yogyakarta, Indonesia. November 10-14, 2014. [Best poster award] Growth performance and H9N2-specific IgG responses in broilers fed with diet containing supplementary organic acids (In Kyu Lee, Suhan Bae, Sun Jong You, Kyung Jin Cho, Jung Sun Kang, **Cheol-Heui Yun**)

The Korean Society of Animal Science and Technology, Pusan National University, Milyang, Korea. June 23-24, 2011.

[Best poster award] Induction of synergistic tolerance in cells from human FasL transgenic pig cocultured with dexamethasone-treated human dendritic cells (In Kyu Lee, Young Min Son, Chae Won Kwak, Young Jun Ju, Dong II JIN, Lee Hwi-Cheul, Woo Jae-Seok, Jae Goo Seol and **Cheol-Heui Yun**).

The Korean Society of Animal Science and Technology, Jinju National University, Jinju, Korea. June 24-25, 2010.

[Best poster award] Comparative analysis of peripheral blood T cells in swine and human (In Su Cheon, Hye Jin Lee, Sang Yun Ji, Sung-Moo Park, and **Cheol-Heui Yun**).

1st International symposium on most valuable products of Korean ginseng, Kyung hee

University, Suwon, December 12-13, 2007.

[Best poster award] Inhibitory effect of OspF from shigella on behavior of dendritic cells (Mi Seon Jang, Dong Hyun Joo, Seung Hyun Han and **Cheol-Heui Yun**).

The 55th Fall Conference of the Korean Association of Immunobiologists, JW Marriott Hotel, Seoul, Korea. November 8-9, 2007.

[Best manuscript award] Lipoteichoic acid and muramyl dipeptide synergistically induce maturation of human dendritic cells and concurrent expression of proinflammatory cytokines

HONORS:

Seoul National University Excellence in Teaching Award, Seoul National University. Dec., 2018.

Distinguished teaching award for the professor, Kukdam Foundation, Seoul National University, Korea. April 14, 2010.

Received official commendation for great service in the area of science and technology from the cabinet minister of the Ministry of Science and Technology, Korea, April 21, 2007.

MILITARY SERVICE:

Army (mandatory): 1983 Aug. - 1986 Jan.

PATENT WORK:

International patents filed

Seung Hyun Han, Ok-Jin Park, Cheol-Heui Yun. BONE LOSS PREVENTING AND BONE REGENERATION OR BONE FORMATION PROMOTING PHARMACEUTICAL COMPOSITION COMPRSING MURAMYL DIPEPTIDE. USA patent filed. [No.: 14/401,408; Date: 2014-11-14; PCT: PCT/KR2012/009094 (2012-11-01); [KR] 10-2012-0051837].

Cheol-Heui Yun and Seung-Hyun Han. Duplex vibriocidal assay for simultaneously determining vibriocidal titers of mixed vibrio vaccines. [PCT/KR2009/007035; Nov. 27, 2009]

Seung Hyun Han, Ki Bum Ahn, Jung Eun Baik, **Cheol-Heui Yun**. AGENT FOR PREVENTING OR INHIBITING FORMATION OF BIOFILM INCLUDING LIPOTEICHOIC ACID OR DERIVATIVE THEREOF, AND METHOD FOR PREVENTING OR INHIBITING FORMATION OF BIOFILM USING SAME. [PCT/KR2013/011876; Dec. 19, 2013].

MG Kim, EG Chung, SH Choi, YJ Choi, **CH Yun**, JH Woo, SK Kang, MG Kim, SS Woo, JH Choi. The enterocyte-transcytotic, tissue target and M cell target peptide identified by the phage display process and drug delivery systems using the same peptide [PCT/KR2007/002566; May. 28, 2007]

Sang-Kee Kang, Min-Kyung Kim, Min-Kook Kim, Jun-Hyung Kim, Jae-Min Shin, **Cheol-Heui Yun**, Ho-Kyung Rhee, Dong-Hyun Jung, Eun-Kyoung Jung, Seung-Hoon Choi, Yun-Haie Choi, Jin-Huk Choi. System, method and program for pharmacokinetic parameter prediction of peptide sequence by mathematical model. [PCT/KR2007/002568; May. 28, 2007] Lillehoj, H. S., **Yun, C. H.,** and Nichols, M. Monoclonal antibodies detecting chicken IFN-gamma and development of *in vitro* assay. 2001. Serial Number 10/024, 288. Document Number 0061.02. (USA).

Domestic patents filed

Sung-Jo Kim, Cheol-Heui YUN, Hyun Sik Jun, Ki Duk Song, Hak-Kyo Lee, Woon Kyu Lee, Eunmi Hwang. Pharmaceutical composition for preventing or treating cancer, comprising a Senecio Rowleyanus Jacobs extract.

Sung-Jo Kim, Cheol-Heui YUN, Hyun Sik Jun, Ki Duk Song, Hak-Kyo Lee, Woon Kyu Lee, Hyungkuen Kim. Pharmaceutical composition for preventing or treating cancer, comprising a Disocactus flagelliformis extract.

Composition for anti-cancer or anti-oxidation comprising the extracts of Sedeveria Pink Ruby as active ingredient (Sedeveria Pink Ruby). 10-2017-0121648 (2017.09.21); No.: 10-1903905 (2018.09.21).

Synthetic LTA mimetics and use thereof as vaccine component for therapy and/or prophylaxis against gram-positive infections. No.: 10-2017-0101573 (2017.08.10). 10-1950881 (2019.02.15).

Method for protecting porcine intestinal barrier using *Bacillus subtilis*. (No: 10-2014-0081005; 2014-06-30). (10-1707920; 2017-02-13).

Anticancer Vaccine Adjuvant Comprising Inactivated *Bacillus Subtilis* Spore As Active Ingredient. (No.: 10-2015-0065687; 2015.05.12).

Composition comprising Lipoteichoic acid and antimicrobial agents for preventing or inhibiting biofilm formation. (No: 10-2017-0035136; 2017.03.21).

Seung Hyun Han, Ok-Jin Park and **Cheol-Heui YUN**. Pharmaceutical composition for preventing bone loss promoting bone regeneration or bone formation comprising muramyl-dipeptide (No.: 10-2012-0125484; 2012-11-07) (No.: 10-1466446; 2014-11-21)

DNA chip for diagnosing microbiota of pig gut, kit comprising the chip and diagnostic method using the kit. (No.: 10-2010-0067788; 2010-07-14), (No.: 10-121225; 2012-12-06)

Cheol-Heui Yun and Seung-Hyun Han. Duplex vibriocidal assay for simultaneously determining vibriocidal titers of mixed vibrio vaccines. (10-2009-0108561, 2009-11-11; 10-1495542, 2015-02-16) [PCT/KR2009/007035; Nov. 27, 2009]

Cheol-Heui Yun, Chong-Su Cho, Seung-Hyun Han, Byoung-Shik Shim, Sung-Moo Park and Ji-Shan Quan. SARS Vaccine Nano-Delivery System. (10-2009-0039306, 2009-05-06; 10-1132413, 2012-03-26).

Jin-huk Choi, Jae Seong Kang, Sung Min Ahn, Seung Hyun Han, Yun-Jaie Choi, **Cheol-Heui Yun**. Nonapeptide targeting B cell lymphoma, Raji (10-2008-0071619, 2008-07-23; 등록번호: 101024702, 2011-03-17)

Identification of peptide ligands to enhance the efficacy of vaccine for M cell mediated delivery system. (10-2006-0083824, 2006-08-31; 10-0859586, 2008-09-16)

MG Kim, EG Chung, SH Choi, YJ Choi, **CH Yun**, JH Woo, SK Kang, MG Kim, SS Woo, JH Choi. The enterocyte-transcytotic, tissue target and M cell target peptide identified by the phage display process and drug delivery systems using the same peptide (10-2007-000299, 2007-01-10) [PCT/KR2007/002566; May. 28, 2007].

PEER REVIEWED PAPER PUBLICATIONS:

PUBLISHED (SELECTED SINCE 2008)

- 1. Narae Kim, Min Jeong Gu, Yoon-Chul Kye, Young-Jun Ju, Rira Hong, Do Bin Ju, Young Jin Pyung, Seung Hyun Han, Byung-Chul Park, **Cheol-Heui Yun**. 2022. Bacteriophage EK99P-1 alleviates enterotoxigenic *Escherichia coli* K99-induced barrier dysfunction and inflammation. **Scientific Reports** Manuscript in press.
- Young-Jun Ju⁺, Sung-Woo Lee⁺, Yoon-Chul Kye, Gil-Woo Lee, Hee-Ok Kim, Cheol-Heui Yun^{*} and Jae-Ho Cho^{*}. 2021. Self-reactivity shapes the functional diversity of naive CD8+ T cells by co-opting tonic type I interferon signaling. Nature Communications 12: 6059. DOI: 10.1038/s41467-021-26351-3. (*contributed equally to this work as a corresponding author).
- Yoon-Chul Kye, Gil-Woo Lee, Sung-Woo Lee, Young-Jun Ju, Hee-Ok Kim, Cheol-Heui Yun* and Jae-Ho Cho*. 2021. STAT1 maintains naive CD8⁺ T cell quiescence by restraining type I IFN-STAT4-mTORC1 signaling axis. Science Advances 7: eabg8764. (*contributed equally to this work as a corresponding author).
- 4. Sung-Moo Park†, Min Jeong Gu†, Young-Jun Ju, In Su Cheon, Kyu-Jam Hwang, Byoungchul Gill, Byoung-Shik Shim, Hang-Jin Jeong, Young Min Son, Sangho Choi, WoonHee Jeung, Seung Hyun Han, Hyuk Chu* and **Cheol-Heui Yun***. 2021. Intranasal vaccination with outer-membrane protein of *Orientia tsutsugamushi* induced protective immunity against scrub typhus. **Immune Netwok** 21: e13.
- 5. Glancing at the major issues of the Animal Bioscience Forum 2020. **Cheol-Heui Yun**. 2021. **Animal Bioscience** 34(5): 787-788. <u>https://doi.org/10.5713/ab.2021.0002ED</u>.
- Keesun Yu, Inhwan Choi and Cheol-Heui Yun. 2021. Immunosecurity: Immunomodulants enhance immune responses in chickens (Special Issue). Animal Bioscience 34(3): 321-337. Animal Bioscience 2021;34(3): 321-337. DOI: https://doi.org/10.5713/ab.20.0851.
- 7. Bon-Hee Gu, Myunghoo Kim* and **Cheol-Heui Yun***. 2021. Regulation of gastrointestinal immunity by metabolites. **Nutrients** 13(1): 167. https://doi.org/10.3390/nu13010167.
- Keesun Yu, Min Jeong Gu, Young Jin Pyung, Ki-Duk Song, Tae Sub Park, Seung Hyun Han, Cheol-Heui Yun. 2020. Characterization of splenic MRC1^{hi}MHCII^{lo} and MRC1^{lo}MHCII^{hi} cells from the monocyte/macrophage lineage in the White Leghorn chicken. Veterinary Research 51: 73. <u>https://doi.org/10.1186/s13567-020-00795-9</u>.
- 9. **Cheol-Heui Yun*** and Chong-Su Cho*. 2020. Nanoparticles to improve the efficacy of vaccine. **Pharmaceutics** 12(5) pii: E418. doi: 10.3390/pharmaceutics12050418. (* served as corresponding author).
- Ji Eun Lee*, Yoon-Chul Kye*, Sung-Moo Park*, Byoung-Shik Shim, Sungsik Yoo, Eunmi Hwang, Hyungkuen Kim, Sung-Jo Kim, Seung Hyun Han, Tae Sub Park, Byung-Chul Park[†], Cheol-Heui Yun[†]. 2020. *Bacillus subtilis* spore as an adjuvant against avian influenza H9N2 induces antigen specific antibody and T cell responses in laying hens. Veterinary Research 51: 68. <u>https://doi.org/10.1186/s13567-020-00788-8</u>.

- 11. Inkyu Yoo, Yoon Chul Kye, Jisoo Han, Minjeong Kim, Soohyung Lee, Wonchul Jung, Minsun Hong, Tae Sub Park*, Cheol-Heui Yun* and Hakhyun Ka*. 2020. Uterine Epithelial Expression of the Tumor Necrosis Factor Superfamily: A Strategy for Immune Privilege during Pregnancy in a True Epitheliochorial Placentation Species. Biology of Reproduction 102(4): 828–842 doi: 10.1093/biolre/ioz233. (* served as corresponding author).
- 12. Han Wool Kim, Do Bin Ju, Yoon Chul Kye, Young-Jun Ju, Cheol Gyun Kim, In Kyu Lee, Sung-Moo Park, In Soon Choi, Kwang Keun Cho, Seung Ho Lee, Sung Chan Kim, In Duk Jung, Seung Hyun Han, Cheol-Heui Yun. 2020. Galectin-9 induced by dietary probiotic mixture regulates immune cell balance to reduce atopic dermatitis symptoms in mice. Frontiers in Immunology 10: 3063. doi: 10.3389/fimmu.2019.03063.
- Yeongkag Kwon, Ok-Jin Park, Jiseon Kim, Jae Ho Cho, Cheol-Heui Yun and Seung Hyun Han. 2019. Cyclic Dinucleotides Inhibit Osteoclast Differentiation Through STING-mediated Interferon-β Signaling. Journal of Bone and Mineral Research doi: 10.1002/jbmr.3701. 34(7): 1366–1375. <u>https://doi.org/10.1002/jbmr.3701</u>.
- 14. Cheol-Heui Yun. 2020. Unforeseen enemy: African swine fever. AJAS. 33(1): 1-3. DOI: https://doi.org/10.5713/ajas.2020.0001ED.
- Cheol Gyun Kim, Yoon-Chul Kye, Cheol-Heui Yun. 2019. The role of nanovaccine in cross-presentation of antigen-presenting cells for the activation of CD8⁺ T cell responses.
 Pharmaceutics 11(11): 612. doi:10.3390/pharmaceutics11110612.
- 16. Jihyun Yang, Ok-Jin Park, Jiseon Kim, Yeongkag Kwon, **Cheol-Heui Yun**, Seung Hyun Han. 2019. Modulation of macrophage subtypes by IRF5 determines osteoclastogenic potential. **Journal of Cellular Physiology** 234(12): 23033-23042. DOI:10.1002/jcp.28863.
- 17. Yoon-Chul Kye, Sung-Moo Park, Byoung-Shik Shim, Jannatul Firdous, Girak Kim, Han Wool Kim, Young-Jun Ju, Cheol Gyun Kim, Chong-Su Cho, Dong Wook Kim, Jae Ho Cho, Man Ki Song, Seung Hyun Han, Cheol-Heui Yun. 2019. Intranasal immunization with pneumococcal surface protein A (PspA) in the presence of nano-particle forming polysorbitol transporter adjuvant induces protective immunity against *Streptococcus pneumoniae* infection. Acta Biomaterialia 90: 362-372. https://doi.org/10.1016/j.actbio.2019.03.049.
- Soo Ji Kim, Girak Kim, Narae Kim, Hyuk Chu, Byung-Chul Park, Jae Seung Yang, Seung Hyun Han, Cheol-Heui Yun. 2019. Human CD141⁺ dendritic cells generated from adult peripheral blood monocytes. Cytotherapy 21(10): 1049-1063. doi: 10.1016/j.jcyt.2019.07.007.
- 19. **Cheol-Heui Yun**. Update and inclusion of the Institutional Animal Care and Use Committee approval in the Asian-Australasian Journal of Animal Sciences. 2019. **AJAS**. 32(9): 1331. DOI: <u>https://doi.org/10.5713/ajas.2019.0001ED</u>.
- Jeong Woo Park, Hyun Young Kim, Min Geun Kim, Soyoung Jeong, Cheol-Heui Yun, Seung Hyun Han. 2019. Short-chain fatty acids inhibit Staphylococcal lipoprotein-induced nitric oxide production in murine macrophages. Immune Network 19(2): e9. https://doi.org/10.4110/in.2019.19.e9.
- 21. Jisoo Han, Wooyoung Jeong, Min Jeong Gu, Inkyu Yoo, **Cheol-Heui Yun**, Jinyoung Kim and Hakhyun Ka. 2019. Cysteine-X-Cysteine Motif Chemokine Ligand 12 and Its Receptor CXCR4: Expression, Regulation, and Possible Function. **Biology of Reproduction** 99(6): 1137-1148. <u>https://doi.org/10.1093/biolre/ioy147</u>.
- 22. Ji Eun Hong^{*}, Yoon Chul Kye^{*}, Sung-Moo Park, In Su Cheon, Hyuk Chu, Byung-Chul Park, Yeong-Min Park, Jun Chang, Jae-Ho Cho, Man Ki Song, Seung-Hyun Han, **Cheol-Heui Yun**. 2019. Alveolar macrophages treated with Bacillus subtilis spore protect mice infected with respiratory syncytial virus A2. **Frontiers in Microbiology** 10: 447. doi: 10.1007/s12275-019-8538-4. (* equal contribution).
- 23. Min Jeong Gu*, Seung Eun Han*, Kyoryen Hwang, Elisabeth Mayer, Nicole Reisinger, Dian Schatzmayr, Byung-Chul Park, Seung Hyun Han, Cheol-Heui Yun. 2019. Hydrolyzed Fumonisin B1 induces less inflammatory responses than Fumonisin B1 in the co-culture model of porcine intestinal epithelial and immune cells. Toxicology Letters 305: 110-116. (* equally contributed as first author). https://doi.org/10.1016/j.toxlet.2019.01.013.

- Kwang Hyun Ko, In Kyu Lee, Girak Kim, Min Jeong Gu, Hyun Young Kim, Byung-Chul Park, Tae Sub Park, Seung Hyun Han and Cheol-Heui Yun. 2018. Changes in bursal B cells in chicken during embryonic development and early life after hatching. Scientific Reports 8(1): 16905. doi: 10.1038/s41598-018-34897-4.
- 25. Han Wool Kim, Rira Hong, Eun Young Choi, KeeSun Yu, Narae Kim, Jin Yi Hyeon, Kwang Keun Cho, In Soon Choi, **Cheol-Heui Yun**. 2018. A probiotic mixture regulates T cell balance and reduces atopic dermatitis symptoms in mice. **Frontiers in Microbiology** 9: 2414. doi: 10.3389/fmicb.2018.02414.
- Seok-Seong Kang, A Reum Kim, Cheol-Heui Yun, and Seung Hyun Han. 2018. Staphylococcus aureus lipoprotein augments IL-6 production in poly I:C-primed macrophages. Cytokine 111: 154-161. doi: 10.1016/j.cyto.2018.08.020.
- 27. In Kyu Lee, Min Jeong Gu, Kwang Hyun Ko, Suhan Bae, Girak Kim, Gwi-Deuk Jin, Eun Bae Kim, Young-Yun Kong, Tae sub Park, Byung-Chul Park, Hyun Jung Jung, Seung Hyun Han and Cheol-Heui Yun. 2018. Regulation of CD4+CD8-CD25+ and CD4+CD8+CD25+ T cells by gut microbiota in chicken. Scientific Reports 8(1): 8627. DOI: 10.1038/s41598-018-26763-0.
- Girak Kim, MinJeong Gu, Soo Ji Kim, Kwang Hyun Ko, Yoon Chul Kye, Cheol Gyun Kim, Jae-Ho Cho, Woon-Kyu Lee, Ki-Duk Song, Seung Hyun Han, Cheol-Heui Yun. 2018.
 KLF10 selectively constrains IL-17-committed γδT cells. Frontiers in Immunology 9: 196. doi: 10.3389/fimmu.2018.00196.
- Ki Bum Ahn, Jung Eun Baik, Cheol-Heui Yun, Seung Hyun Han. 2018. Lipoteichoic acid inhibits Staphylococcus aureus biofilm formation. Frontiers in Microbiology 9: 327. doi: 10.3389/fmicb.2018.00327.
- 30. Ju-Ri Sim, Seok-Seong Kang, Daesang Lee, **Cheol-Heui Yun** and Seung Hyun Han. 2018. Butyrate enhances cholera vaccine-induced CCL20 secretion in human intestinal epithelial cells. **Frontiers in Immunology** 9: 55. doi: 10.3389/fimmu.2018.00055.
- 31. Shenfei Long, Yetong Xu, Qianqian Wang, Chunlin Wang, Jiayi Wu, Yuanyuan Wu, Yanming Han, Cheol-Heui Yun, Xiangshu Piao. 2018. Efficacy of organic acids compound as antibiotic substitutes on performance, nutrient digestibility, intestinal microbiota, gut morphology and immune function of weaned piglets. Animal Feed Science and Technology 235: 23-32. <u>https://doi.org/10.1016/j.anifeedsci.2017.08.018</u>.
- 32. Ok-Jin Park, Jiseon Kim, Jihyun Yang, **Cheol-Heui Yun**, Seung Hyun Han. 2017. Muramyl dipeptide, a shared structural motif of peptidoglycans, is a novel inducer of bone formation through induction of Runx2. **Journal of Bone and Mineral Research** 32(7): 1455-1468. doi: 10.1002/jbmr.3137.
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