

## 1. Oral Presentations in Conference/Symposium

**3. Mahbub Hasan**, Hophil Min, Khandoker Asiqur Rahaman, Dohyun Han, Oh-Seung Kwon. Quantitative proteome analysis in brain and spinal cord of experimental autoimmune encephalomyelitis mice by TMT-based mass spectrometry. 2017 annual meeting of Korean Society of Applied Pharmacology, Seoul National University, Seoul, October 13, 2017.

**2. Mahbub Hasan**, Ji-Eun Seo, et al., Gene Expression Profiles of Experimental Autoimmune Encephalomyelitis in Brain Tissue of Normal and Obese Mice. *Asian Federation for Pharmaceutical Sciences (AFPS), Ramada Plaza Hotel, Jeju, Republic of Korea. Nov 20-22 2013.*

**1. Mahbub Hasan**, Ji-Eun Seo, et al., Increased Matrix Metalloprotease-9 Activity in Diet-Induced Obesity Aggravates Disease State in Mouse Model of Multiple Sclerosis. *3<sup>rd</sup> University of Science and Technology Conference, Daejeon, the Republic of Korea, November 1-2, 2012; p58.*

## 2. Conference Proceedings (International; as first author)

**6. Mahbub Hasan**, Ji-Eun Seo, et al., Significant upregulation of metal ion-binding protein genes in experimental autoimmune encephalomyelitis (EAE)-induced obese mice. *2016 International Conference of Korean Society of Pharmaceutical Science and Technology, The K-Hotel, Seoul, Korea Dec 1-2, 2016 (pBPM 010).*

**5. Mahbub Hasan**, Ji-Eun Seo, et al. Changes of Dopamine and Serotonin Levels In Plasma And Brain of 79 Weeks Old Normal and Diet-Induced Obese Experimental Autoimmune Encephalomyelitis Mice. *55<sup>th</sup> Annual Meeting, Society of Toxicology, Ernest N. Morial Convention Center, New Orleans, LA, USA, March 13-17, 2016 (P522).*

**4. Mahbub Hasan**, Ji-Eun Seo, et al., Identification of novel genes up-regulated in the brain tissue of experimental autoimmune encephalomyelitis (EAE) mice fed in normal and high fat diet. *International Symposium and Annual meeting of the Korean society of applied biological chemistry, Hueundae Geand Hotel, Busan, Korea. June 19-21, 2014. PBM-109.*

**3. Mahbub Hasan**, Ji-Eun Seo, et al., Effects of Brain 5-HT levels and Plasma MMP-9 Activity on Disease Severity of Experimental Autoimmune Encephalomyelitis in High Fat Diet Induced Obese Mice. *The XIII International Congress of Toxicology, COEX, Seoul, Republic of Korea. June 30- July 4, 2013.*

**2. Mahbub Hasan**, Ji-Eun Seo, et al., Inflammatory changes in high fat diet induced obese mice exacerbate Experimental Autoimmune Encephalomyelitis (EAE). *2012 KSMCB (Korean Society for Molecular and Cellular Biology) Annual Meeting, COEX, Seoul, Republic of Korea. October 10-12, 2012; G5.*

**1. Mahbub Hasan**, Hye-Yeon Im, et al., Screening of anti-obesity drug candidate KPOS0017, a new synthetic 5-HT<sub>2C</sub> receptor ligand, by acute and two weeks repeated administration to C57BL/6 mice. *2012 Proceedings of International Congress of Korean federation of*

*Pharmaceutical Societies, International Convention Center (ICC), Juju, Republic of Korea. April 19-21, 2012; P2-35.*

### **3. Conference Proceedings (International; as co-author)**

**21.** Renovato-Martins M, Dudenhoeffer-Carneiro AC, Du Rocher-Silva B, Soares F, Aquino Neto FR, **Hasan M**, Rahaman KA, Muresan A, Oh-Seung K, Mirotti L, Pereira HM. Erythrocyte phenotyping of international athletes by flow Cytometry. *Manfred Donike Workshop, 38th Cologne Workshop on Dope Analysis. Cologne, Germany, Feb 9-14, 2020.*

**20.** Khandoker Asiqur Rahaman, **Mahbub Hasan**, Anca Raluca Muresan, Min Hophil, Kim Hyeyoon, Han Dohyun, and Oh-Seung Kwon. Comprehensive proteome map of the brain and spinal cord from experimental autoimmune encephalomyelitis mice by TMT-based orbitrapLC/MS-MS. *2019 Spring International Convention of The Pharmaceutical Society of Korea, Millennium Seoul Hilton Hotel, Seoul, Korea, Apr. 25-26, 2019 (YSS5-1).*

**19.** Khandoker Asiqur Rahaman, **Mahbub Hasan**, Anca Raluca Muresan, and Oh-Seung Kwon. Reversal of 2-Amino-2-norbornanecarboxylic Acid Inhibitory Effects in Cells Treated with EAE Antigen. 2018 International Conference of The Korean Society of Pharmaceutical Society and Technology. *The Hyundai Grand Hotel, Busan, Korea, Nov. 23, 2018 (pBPM-003).*

**18.** Khandoker Asiqur Rahaman, **Mahbub Hasan**, Anca Raluca Muresan, and Oh-Seung Kwon. Inhibition of L-amino acid transporter-1 intensified disease symptoms on experimental autoimmune encephalomyelitis (EAE) mice model. *2017 International Conference of the Korean Society for Molecular and Cellular Biology, The CoEx, Seoul, Korea.*

**17.** Ji-Eun Seo, **Mahbub Hasan**, Khandoker Asiqur Rahaman, Soo-In Yu, Kang Mi Lee, Ho Jun Kim, Junghyun Son, Jaeick Lee, and Oh-Seung Kwon. Age-related EAE disease is susceptible to the early haematological changes. *2016 International Conference of Korean Society for Pharmaceutical Science and Technology, The K-Hotel, Seoul, Korea, Dec 1-2, 2016 (pBPM 009).*

**16.** Khandoker Asiqur Rahaman, Joon-Seung Han, **Mahbub Hasan**, Ji-Eun Seo, Kyung-Tae Lee, Hophil Min, Kang Mi Lee, Ki Hun Kim, Jaeick Lee, and Oh-Seung Kwon. Subcutaneous administration of human chorionic gonadotropin (hCG) deteriorates experimental autoimmune encephalomyelitis (EAE) symptoms due to concurrent changes in haematological parameters. *2016 International Conference of Korean Society for Pharmaceutical Science and Technology, The K-Hotel, Seoul, Korea, Dec 1-2, 2016 (pBPM 011).*

**15.** Ji-Eun Seo, **Mahbub Hasan**, Joon-Seung Han, Nak-Kyoon Kim, Ji Eun Lee, Kang Mi Lee, Ju-Hyung Park, Ho Jun Kim, Junghyun Son, Jaeick Lee and Oh-Seung Kwon. Dependency of EAE induction on MOG<sub>35-55</sub> properties by affecting MMP-9, IL-6, VCAM-1 and IFN- $\gamma$ . International Symposium and Annual meeting of the Korean society of applied biological chemistry, Hueundae Geand Hotel, Busan, Korea, June 19-21, 2014

**14.** Joon-Seung Han, Ji-Eun Seo, **Mahbub Hasan**, Nak-Kyoon Kim, Ji Eun Lee, Kang Mi Lee, Ju-Hyung Park, Ho Jun Kim, Junghyun Son, Jaeick Lee, and Oh-Seung Kwon. *Sub-chronic treatment of human chorionic gonadotropin affects severity of experimental*

*autoimmune encephalomyelitis in mice*. International Symposium and Annual meeting of the Korean society of applied biological chemistry, Hueundae Geand Hotel, Busan, Korea, June 19-21, 2014

**13.** Ji-Eun Seo, **Mahbub Hasan**, Min-Jung Kang, Byung-Hwa Jung, Suk Woo Nam, Won Sang Park, Ho-Youn Kim and Oh-Seung Kwon, Mechanisms of Blood-Brain Barrier Disruption in Experimental Autoimmune Encephalomyelitis of Aged Mice. The XIII International Congress of Toxicology, COEX, Seoul, Republic of Korea, June 30- July 4, 2013.

**12.** Ji-Eun Seo, **Mahbub Hasan**, Sailendra Sarma, Min-Jung Kang, Byung-Hwa Jung, Mi-La Cho, Suk Woo Nam, Won Sang Park, Ho-Youn Kim, and Oh-Seung Kwon: Gene analysis of brain in aged-experimental autoimmune encephalomyelitis mice reveals over-expression of stress response pathway-related genes. J Immunol May 2013 190 (Meeting Abstract Supplement) 51.18

**11.** Ji-Eun SEO, **Mahbub HASAN**, Sailendra Nath SARMA, Oh-Seung KWON. Higher Blood-brain barrier disruption with adhesion molecules and cytokine changes in aged EAE model. 2012 KSMCB (Korean Society for Molecular and Cellular Biology) Annual Meeting, COEX, Seoul, Republic of Korea. October 10-12, 2012; G4.

**10.** J. E. Seo, H. Y. Im M. M. Haque, **M. Hasan**, M. J. Kang, S. K. Kwok, B. W. Jung, O. S. Kwon. *Immune system change with aging leads to different susceptibility of EAE. 51<sup>st</sup> annual meeting of Society of Toxicology (SOT), San Francisco, California. March 11-15, 2012. Abstract ID:2749.*

**9.** Seo Ji-Eun, Im Hye-yeon, Lim Mi-Ae, Haque Md. Mamunul, **Hasan Mahbub**, Kang Min-Jung, Jung Byung-Hwa, Kwok Seung-Ki, Kwon Oh-Seung. Age-Related Changes in Experimental Autoimmune Encephalomyelitis: Severity of Experimental Autoimmune Encephalomyelitis is Increased in Old Mice. *Proceedings of the Fall International Convention of the Pharmaceutical Society of Korea. Songdo Convensia, Incheon, Republic of Korea, November 07-09, 2011; p209 (ISSN; 1598-6047).*

**8.** Ji-Eun Seo, Hye-yeon Im, Md. Mamunul Haque, **Mahbub Hasan**, Min-Jung Kang, Byung-Hwa Jung, Oh-Seung Kwon. Hematological and Immunological Changes in Aged Mice and Experimental Autoimmune Encephalomyelitis-induced Mice. *27<sup>th</sup> Annual meeting of KSOT/KEMS, Hyatt Regency Hotel, Jeju, Republic of Korea, November 03-04, 2011; p209*

**7.** Ji-Eun Seo, Hye-yeon Im, Mi-Ae Lim, Haque Mamunul, **Hasan Mahbub**, Min-Jung Kang, Byung-Hwa Jung, Seung-Ki Kwok, Oh-Seung Kwon. Effects on Aging and Activities of NADPH Oxidase and MMP-9 in Experimental Autoimmune Encephalomyelitis. *2011 년 대한면역학회. 대한천식알레르기학회 춘 계 공동 학술 대회, Seoul Grand Hilton Hotel, Seoul, Republic of Korea, June 3-4, 2011; p72.*

**6.** Seo Ji-Eun, Im Hye-yeon, Lim Mi-Ae, Md. Mamunul Haque, **Mahbub Hasan**, Kang Min-Jung, Jung Byung-Hwa, Kwok Seung-Ki, Kwon Oh-Seung. Effect of aging on the induction of experimental autoimmune encephalomyelitis in C57BL/6 mice. *Proceedings of the Spring International Convention of the Pharmaceutical Society of Korea. Busan Exhibition & Convention Center (BEXCO), Busan, Republic of Korea, April 21-22, 2011; p223 (ISSN; 1598-6047).*

5. Hye-yeon Im, Ji Eun Seo, Md. Mamunul Haque, **Mahbub Hasan**, Chan-Hwa Kim, Oh-Seung Kwon. Pharmacokinetics of Esculin (glycoside form of esculetin) in Control and Pseudo Germ-Free Rats. *2011 International Conference of the Korean Society of Pharmaceutical Sciences and Technology. Ramada Plaza, Cheongju Hotel, Cheongju, Republic of Korea, November 10-11, 2011; p178.*
4. Im Hye-yeon, Seo Ji-Eun, Haque Md. Mamunul, **Hasan Mahbub**, Kim Chan-Hwa, Kwon Oh-Seung. Pharmacokinetics of Esculetin in Control and Pseudo Germ-Free Rats. *Proceedings of the Fall International Convention of the Pharmaceutical Society of Korea. Songdo Convensia, Incheon, Republic of Korea, November 07-09, 2011; p163 (ISSN; 1598-6047).*
3. Haque Md. Mamunul, **Hasan Mahbub**, Im Hye-yeon, Seo Ji-Eun, Woo Kyoungja, Kwon Oh-Seung. *In vivo* Acute Toxicity and Tissue-Sites of Uptake of CdSe/CdS-MPA Quantum Dots to Mice after Intravenous Injection. *Proceedings of the Fall International Convention of the Pharmaceutical Society of Korea. Songdo Convensia, Incheon, Republic of Korea, November 07-09, 2011; p199 (ISSN; 1598-6047).*
2. Md. Mamunul Haque, **Mahbub Hasan**, Hye-Yeon Im, Ji Eun Seo, Kyoungja Woo, Oh-Seung Kwon. Distribution and Acute Toxicity of CdSe/CdS-PEG-FA Quantum Dots in Mice after Intravenous Injection. *2<sup>nd</sup> University of Science and Technology Conference. University of Science and Technology Administration Building, Daejeon, Republic of Korea, September 22-23, 2011; p123.*
1. Im Hye-yeon, Seo Ji-Eun, Md. Mamunul Haque, **Hasan Mahbub**, Kim Chan-Hwa, Kwon Oh-Seung. Determination of Esculin in rat plasma by high performance liquid chromatography-fluorescence detector and UV detector. *Proceedings of the Spring International Convention of the Pharmaceutical Society of Korea., Busan Exhibition & Convention Center (BEXCO), Busan, Republic of Korea, April 21-22, 2011; p165 (ISSN;1598-6047).*