

# LMCE KSLM

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## 2016 & 57<sup>th</sup> ANNUAL MEETING

October 26-28, 2016 The K-Hotel, Seoul, Korea

**Name:** Byeong-Sun Choi

**Position:** Senior Scientist (Deputy Scientific Director), Division of AIDS, Center for Immunology and Pathology, Korea National Institute of Health,

### Education:

Year	Institution/School	Degree	Major
1988 – 1992	Department of Biology, Chung-Nam National University, Taejon, Koea	B.S.	Biology
1993 – 1995	The Graduate School of Biology, Korea University, Seoul, Korea <i>(Thesis: Comparative study on immunologic markers between human immunodeficiency virus (HIV)-infected and normal persons in Korea)</i>	M.S	Microbiology
1995 – 2001	The Graduate School of Biology, Korea University, Seoul, Korea <i>(Thesis: Immunogenetic Influence of CD28 Molecule and Chemokine Gene Variants on Disease Progression of Koreans with HIV Infection)</i>	Ph.D	Microbiology

### Research and Professional Experiences:

03/1992 – 10/2003	Center for AIDS Research, Department of Virology, National Institute of Health, Seoul, Korea	Junior Scientist
10/1995 – 12/1995	Japanese Foundation of AIDS Prevention, Tokyo, Japan (International course on AIDS prevention and Care in Asia)	JFAP fellow
09/2001 – 12/2001	Department of Biology, Han-Yang University, Seoul, Korea	Lecture Professor (Virology)
09/2002 – 12/2002	Department of Biology, Han-Yang University, Seoul, Korea	Lecture Professor (Virology)
11/2003 – 10/2005	HIV and AIDS Malignancy Branch, National Cancer Institute, National Institute of Health, Bethesda, MD, USA	Visiting Fellow (Post-Doc)
11/2005 – 12/2008	Division of AIDS, Center for Immunology and Pathology, National Institute of Health, Seoul, Korea	Junior Scientist
12/2008 – Present	Division of AIDS, Center for Immunology and Pathology, National Institute of Health, Seoul, Korea	Senior Scientist

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Awards & Scientific Careers:

- 2001. 6: Korea NIH Director's Award for The Best Official of This Year
- 2001. 12: Health and Welfare Minister's Award for Contribution of HIV/AIDS Prevention
- 2003. 4: The 13<sup>th</sup> Best Scientist Award

(The Korean Federation of Science and Technology Societies, KFST)

- 2008 - Present: Member, The Korean Society of Virology
- 2008 - Present: Senior Member, The Korean Society for AIDS
- 2011. 11. 25: KOSAids President's Award for The Best Scientist of This Year
- 2013 : Nomination for **Marquis Who's Who in the World 2013**
- 2013 : **2000 Outstanding Intellectuals of the 21st Century 2013**
  - International Biographical Centre (IBC) in England
- 2013 : **The Top 100 Scientists 2013** – International Biographical Centre in England
- 2014 : Nomination for **Marquis Who's Who in the World 2014**
- 2015 : Korea NIH President's Patent Award of This Year

### Publications: 55

1. Shin YH, Yoon CH\*, Yang HJ, Lim HY, **Choi BS**, Kim SS, Kang C. Functional characteristics of the natural polymorphisms of HIV-1 gp41 in HIV-1 isolates from enfuvirtide-naïve Korean patients. **Archives of Virology** 2016;161(6):1547-1557
2. Kim KC, **Choi BS**\*, Kim KC, Park KH, Lee HJ, Cho YK, Kim SI, Kim SS, Oh YK, Kim YB. A Simple Mouse Model for Study of HIV. **AIDS Res Hum Retroviruses** 2016;32(2):194-202 \* **Co-first**
3. Shin YH, Yoon CH, Lim HY, Park JH, Roh TY, Kang C, **Choi BS**. Impaired T-Cell functions in HIV-1 latent infection. **BBRC** 2015: 463:1237-1242
4. Woo HJ, Kim SJ, Song KJ, Kim SS, Yoon CH, **Choi BS**, Rhee JE. Hypermethylation of the tumor-suppressor cell adhesion molecule 1 in human papillomavirus-transformed cervical carcinoma cells. **International Journal of Oncology** 2015;46:2656-2662
5. Park H, Chung YS\*, Yoon CH, Lee SH, Lee YR, Kim SS, Kang C, **Choi BS**. Presentation of available CTL epitopes that induction of cell-mediated immune response against HIV-1 Koran clade B strain using computational technology. **HIV Medicine** 2015

### Patents: 14

1. Method of detection for HPV L1 gene using nested PCR assay (**Patent No. 10-0988755**, Registration Date(10/13/2010))
2. HIV-1 latent cell line, its manufacturing process, and diagnostic method of HIV-1 latency (**Patent No. 10-1049856** for NCHA-1 cell line; **10-1049857** for NCHA-2 cell line; **10-1049858** for NCHA-3 cell line, Registration Date(07/11/2011))
3. Multiplex PCR primers and detection method for diagnosing herpesviruses(**Patent No. 10-1099041**, Registration Date(12/20/2011))
4. Method of providing the information for diagnosis of uterine cervical cancer using cell line stably expressing mutated oncogene E6 and diagnostic kit(**Patent No. 10-1120455** , Registration Date(02/20/2012))
5. Cell line stably expressing mutated oncogene E6 and method of screening anticancer compound of uterine cervical cancer using this cell line(**Patent No. 10-1223980** , Registration Date(01/14/2013))
6. Cell line stably expressing mutated oncogene E6 and method of screening anticancer compound of uterine cervical cancer using the same(**Patent No. US 8,835,164 B2**, Registration Date(09/16/2014))
7. Histone deacetylase inhibitor reactivating HIV-1 provirus from latently HIV-infected cells (**Patent No. 10-1388596**, Registration Date(04/17/2014))
8. Recombinant peptide having T cell epitope derived from HIV-1 and vaccine composition comprising there of (**Patent No. 10-1476255**, Registration Date(12/18/2014))
9. A humanized HIV infected animal model and its manufacturing process (**Patent No. 10-1525232**, Registration Date(05/22/2015))
10. Use of IP-10 for predicting rapid progress to AIDS for early HIV-1 infected subjects (**Patent No. 10-1542510**, Filing Date(07/31/2015))
11. Primer set for the amplifying antiretroviral drug resistance-related HIV-1 gene and Premix Composition with the primer set (**Patent No. 10-1542570**, Filing Date(07/31/2015))
12. A primer set for analyzing a base sequence of an antiretroviral drug-resistant gene derived from HIV-infected individuals (**Patent No. 10-1605524**, Filing Date(03/16/2016))

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Patents pending: 5

1. T Cell-Targeting Delivery of HDAC Inhibitors (**Application No. 2010-0053258**, Filing Date(06/07/2010))
2. NUCKS1, Novel Coactivator regulating the transcriptional activity of HIV-1 Tat (**Application No. 10-2014-0049837**, Filing Date(04/25/2014))
3. The assay to measure the activities of fusion inhibitor for HIV-1 isolated from HIV-infected patients(**Application No. 10-2015-0117303**, Filing Date (08/20/2015))
4. Animal Models for Efficacy Evaluation of Drug Candidates for Treating Cervical cancer, Process of manufacturing the Animal Models and Application(**Application No. 10-2015-0159740**, Filing Date(11/13/2015))