# Curriculum Vitae

 $January\ 20,\ 2015$ 

Hsuan-Cheng Huang (黃宣誠)

Professor & Director

Institute of Biomedical Informatics

National Yang-Ming University

155, Sec. 2, Li-Nong St., Taipei 112, Taiwan
Email: hsuancheng@ym.edu.tw.

Birth: Oct. 31, 1970

Citizenship: Taiwan, R.O.C.

Married with 1 child

Tel: +886-2-2826-7357

Fax: +886-2-2820-2508

URL: http://hchuang.info/

Research Area: Systems Biology, Bioinformatics, Computational Biology, Network Biology

## Professional Experience:

2012/8 – present	Professor, Institute of Biomedical Informatics,
, 1	Center for Systems and Synthetic Biology, National Yang-Ming University
2013/6 - present	Director, Inst. of Biomedical Informatics, National Yang-Ming Univ.
2006/8 - present	Core Faculty, Bioinformatics Program,
, 1	Taiwan International Graduate Program (TIGP), Academia Sinica
2010/3 - present	Associate Editor & Deputy Section Editor, BMC Systems Biology
2014/11 – present	Executive Board Member, Taiwan Society of Evolution and Computational Biology
2012/8 - 2013/6	Acting Director, Inst. of Biomedical Informatics, National Yang-Ming Univ.
2009/4 - 2014/2	Board Member, Taiwan Society for Bioinformatics and Systems Biology
2008/8 - 2012/7	Associate Professor, Institute of Biomedical Informatics,
, ,	Center for Systems and Synthetic Biology, National Yang-Ming University
2008/10 - 2012/7	Adjunct Associate Professor, Graduate Institute of
	Molecular Systems Biomedicine, China Medical University
2007/8 - 2008/7	Assistant Professor, Institute of Biomedical Informatics,
	Center for Systems and Synthetic Biology, National Yang-Ming University
2007/8 - 2008/2	Visiting Scholar, University of California, Los Angeles, USA
2007/4 - 2009/3	Board Member & Executive Supervisor,
	Taiwan Society for Bioinformatics and Systems Biology
2006/7 - 2006/8	Visiting Scholar, Nara Institute of Science and Technology, Japan
2004/8 - 2007/7	Assistant Professor, Institute of Bioinformatics, National Yang-Ming University
2003/11 - 2004/7	Research Fellow & Director of Bioinformatics, Inpac Inc., Taiwan
2003/11 - 2004/7	Visiting Scientist, Institute of Biological Chemistry, Academia Sinica
2002/11 - 2003/10	NSC Distinguished Postdoctoral Scholar,
	Department of Physics, National Taiwan University
1998/8 - 2002/10	Postdoc, Department of Physics, National Taiwan University
1997/7 - 2001/8	Visiting Scientist, High Energy Accelerator Research Organization (KEK), Japan
1992/9 - 1998/7	Graduate Research Assistant, Department of Physics, National Taiwan University
1996/10 - 1997/12	Visiting Scientist, National Laboratory for High Energy Physics (KEK), Japan
1991 - 1995	Graduate Research Assistant, Institute of Biological Chemistry, Academia Sinica

## Education:

1994 - 1998	Ph.D., Physics, National Taiwan University
	Dissertation: Search for T-Violating Muon Polarization in $K^+ \to \gamma \mu^+ \nu_\mu$ Decay
1992 - 1994	M.A., Physics, National Taiwan University
	Master Thesis: Effect of SU(2)-Singlet Charge-2/3 Quark on Top Quark Properties
1988 - 1992	B.A., Department of Physics, National Taiwan University
1985 - 1988	Hsinchu Senior High School
	Talented Student Program in Biology at Academia Sinica

### Honors and Awards:

2007NSC Wu Ta-You Memorial Award (吳大猷先生紀念獎)2007-2013National Yang-Ming University Academic Excellence Awards2002NSC Distinguished Postdoctoral Fellowship

## • Competition Prizes

- Poster Awards, 2014 Taiwan Proteomics Society Annual Meeting & Translational and Systems Biology Symposium (TPS2014), NTU, Taipei, Taiwan, November 11 – 12, 2014. (with students Wen-Hsuan Yu, Pei-Chun Lu)
- The Best Poster Award, 2014 International Symposium on Evolutionary Genomics and Bioinformatics (ISEGB 2014), NCKU, Tainan, Taiwan, November 7 8, 2014. (with student Pei-Chun Lu)
- Honorable Mention, the 11th Symposium on Bioinformatics and Systems Biology in Taiwan (BIT2013), Taipei, Taiwan, October 18 21, 2013. (with student Cheng-Jin Huang)
- The First Prize & Second Prize of Poster Competition, the 18th Biophysics Conference, Taipei, Taiwan, June 27 29, 2013. (with postdocs Hsin-Yi Chang, Chia-Lang Hsu)
- Advising student Ken-Chi Yang awarded Finalists for Yin Xun-Ruo Master Thesis Competition, May, 2013.
- The Third Prizes of Poster Competition, 2013 Taiwan Proteomics Society International Conference
   Recent Advances in Translational Medicine, Taipei, Taiwan, May 24 25, 2013. (with student Chie-Ren Hsia and postdoc Hsin-Yi Chang)
- Excellent Poster Award, 28th Joint Annual Conference of Biomedical Sciences, Taipei, Taiwan, March 23 – 24. (with student K.-H. Hsu)
- Poster Award, the 10th Symposium on Bioinformatics and Systems Biology in Taiwan (BIT2012),
   Taipei, Taiwan, October 19 21, 2012. (with student Ken-Chi Yang)
- Poster Awards, the 9th Symposium on Bioinformatics and Systems Biology in Taiwan (BIT2011),
   Taipei, Taiwan, September 28 30, 2011. (with students Tzu-Chi Kuo, Chen-Chin Lin, Hao-Han Liao)
- The Third Prize of Poster Competition, the 16th Biophysics Conference, Huanlien, Taiwan, May  $18-21,\,2011.$  (with student Hsuan-Kai Wang)
- Poster Awards, 2011 Translational Medicine Conference and Taiwan Proteomics Society Annual Symposium, Taipei, Taiwan, April 27 – 28, 2011. (with students Chien-Wei Cheng, Yi-Hsuan Wu)
- Poster Award, the 26th Joint Annual Conference of Biomedical Science, Taipei, Taiwan, March 19 – 20, 2011. (with student Kai-Neng Chuang)
- Poster Award, the 15th Joint Biophysics Conference, Academia Sinica, Taipei, Taiwan, May 19
   21, 2010. (with student Cheng-Yu Chen)
- Poster Award, the 25th Joint Annual Conference of Biomedical Science, Taipei, Taiwan, March, 2010. (with student Chung-Cheng Hsu)
- Poster Award, 2009 TPS International Proteomics Conference and 5th AOHUPO MPI Workshop, Taipei, Taiwan, June 19 20, 2009. (with student Meng-Shuang Lee)
- Third Prize of poster competition, 2008 Taiwan-Japan Proteomics Symposium, Taipei, Taiwan,
   December, 2008. (with student Chia-Wei Hu)
- Advising student Chun-Wei Hsu awarded Yin Xun-Ruo Master Thesis Prize, June, 2008.
- Poster Awards (three), Mawudu Autumn School, Taiwan Society of Biochemistry and Molecular Biology, Taiwan, October, 2007. (with students Chi-Chin Chang, Hsin-Yi Chang, Chia-Wei Hsu)
- Advising student Chen-Ching Lin awarded Yin Xun-Ruo Master Thesis Prize, June, 2007.
- Poster Award, the XXII Joint Annual Conference of Biomedical Sciences, Taiwan, March, 2007.
   (with student Cheng-Pao Chen)

- First and Second Prizes of poster competition, Fourth Asia Pacific Bioinformatics Conference, Taiwan, February, 2006. (with students Yue-Yang Bow, Jen-Yun Chang; Cheng-Han Ou)
- Second Prize of poster competition, Bioinformatics in Taiwan 2004, Taiwan, September, 2004.
   (with student Jia-Je Li)
- Top 10 Prize of poster competition, the Third International Proteomics Conference, Taiwan, May, 2004. (with student Jia-Je Li)
- Best Poster Award, the Fourth International Conference on B Physics and CP Violation, Japan, February, 2001.
- Prize for Outstanding Performance, National Mathematics Contest, Taiwan, R.O.C., 1987.

## Synergistic Activities:

### • Journal Reviewer

Bioinformatics, PLoS Computational Biology, Briefings in Bioinformatics, BMC Systems Biology, BMC Bioinformatics, BMC Evolutionary Biology, Nucleic Acids Research, Journal of Proteome Research, Proteomics, Molecular BioSystems, Journal of Computational Biology, Physical Biology, Scientific Reports, PLoS ONE, Cell Cycle, Oncotarget, Genome Biology and Evolution, BMC Genomics, BMC Medical Genomics, BMC Evolutionary Biology, Molecular Genetics and Genomics, Gene, Genetica, Apoptosis, Biotechnology and Bioengineering, Integrative Biology, Computational Biology and Chemistry, Computer Methods and Programs in Biomedicine, IEEE Transactions on Fuzzy Systems, IEEE Transactions on Knowledge and Data Engineering, International Journal of Data Mining and Bioinformatics, Journal of Information Science and Engineering, Journal of Medical and Biological Engineering, Journal of Taiwan Institute of Chemical Engineers (Journal of Biological Systems, The Python Papers

### • Conference Program Committee

- The 2nd International Conference on Algorithms for Computational Biology (AlCoB 2015), July 28-30, 2015, Mexico City.
- The 13th Asia Pacific Bioinformatics Conference (APBC2015), January 21 23, 2015, Hsinchu, Taiwan.
- The 25th International Conference on Genome Informatics (GIW/ISCB-Asia 2014), December  $15-17,\,2014,\,$  Tokyo, Japan.
- The 5th International Conference on Computational Systems Biology and Bioinformatics (CSBio 2014), November 10-12, 2014, Singapore.
- The 24th International Conference on Genome Informatics (GIW2013), December 16 − 18, 2013, Singapore.
- ISCB-Asia/SCCG 2012, December 17 19, 2012, Shenzhen, Chian.
- The 10th Symposium of Bioinformatics and Systems Biology in Taiwan (BIT2012), October 19
   21, 2012, Taipei, Taiwan
- 11th IEEE International Conference on Bioinformatics and Bioengineering (BIBE2011), October 24-26, 2011, Taichung, Taiwan
- The 9th Symposium of Bioinformatics and Systems Biology in Taiwan (BIT2011), September 28
   30, 2011, Taipei, Taiwan
- 2010 International Workshop on Data Mining for Biomarker Discovery (DMBD2010), December  $18-21,\,2010,\,\mathrm{Hong}$  Kong
- 2010 International Computer Symposium (ICS'10), Workshop on Biomedical Informatics, December 16 − 18, 2010, Tainan, Taiwan
- The 8th Annual Symposium of Bioinformatics and Systems Biology in Taiwan (BIT2010), September 30 Oct. 2, 2010, Taiwan

- 2009 International Workshop on Data Mining for Biomarker Discovery (DMBD 2009), November 1st – 4th, 2009, Washington DC, USA
- The 9th IEEE International Conference on Bioinformatics and Bioengineering (BIBE2009), June 22-24, 2009, Taichung, Taiwan
- 2008 Joint Conference on Medical Informatics in Taiwan (JCMIT2008), November 21 31, 2008,
   Taipei, Taiwan
- 2008 International Computer Symposium (ICS2008), November 13 15, 2008, Taipei, Taiwan
- 2006 International Computer Symposium (ICS2006), Workshop on Medical and Bio-Informatics, December 4 6, 2006, Taipei, Taiwan
- The 7th International Conference on Systems Biology (ICSB2006), October 9 13, 2006, Yokohama, Japan
- 2006 Workshop on Pattern Recognition in Bioinformatics (PRIB'06), August 20, 2006, Hong Kong, China

### • Conference Reviewer

- The 9th Asia Pacific Bioinformatics Conference (APBC2011), Incheon, Korea, January 11-14, 2011
- Symposium and Workshop of Bioinformatics in Taiwan 2006 (BIT2006), Taichung, Taiwan,
   September, 2006
- The Third Asia-Pacific Bioinformatics Conference (APBC2005), Singapore, January, 2005

### • Conference Administration

- Organisers, The 3rd EITA-Bio and the 15th Emerging Information and Technology Conference (EITA-EITC 2015), Taipei, Taiwan, November 21 – 22, 2015
- General Chair, The 12th Bioinformatics and Systems Biology in Taiwan (BIT2014), Taipei, Taiwan, November 13 14, 2014
- Organizing Committee, 2014 Annual Meeting of Taiwan Proteomics Society and Translational and Systems Biology Symposium, Taipei, Taiwan, November 11-12, 2014
- Session Chair, The 2014 EITA Conference on New Media and Biomedical Research, Cambridge, Massachusetts, July 31 – August 1, 2014
- General Chair, The 11th Bioinformatics and Systems Biology in Taiwan (BIT2013), Taipei, Taiwan, October 18-21, 2013
- Organizing Committee, The 6th IECA Conference on Synthetic Biology with Applications to Biotechnology (IECA2012), Taipei, Taiwan, December 10–12, 2012
- Session Chair, High Throughput Screening Technology Symposium, NCKU, Tainan, Taiwan, October 1 2, 2009
- Session Co-chair, 12th SCBA International Symposium, June 14 –18, 2009, Taipei, Taiwan
- Session Co-chair, Westlake Conference for Personalized Medicine, Hangzhou, China, May 29–31, 2009
- Session Chair & Local Organizing Committee, The 7th International Conference of Bioinformatics (InCoB 2008), Taipei, Taiwan, October 20–22, 2008
- Chair & Organizer, The Second ABREN Virtual Workshop on Bioinformatics, July 2007
- Co-organizer, 2007 Systems Biology and Bioinformatics Symposium and Workshop (SBBS07), Taipei, Taiwan, March  $27-29,\,2007$
- Session Chair, The Second Taiwan-Japan Bilateral Symposium on Bioinformatics, Tainan, Taiwan, November 7 9, 2006
- Session Chair, The Fifth Emerging Information Technology Conference (EITC2006), Dallas, Texas, August 10–12, 2006

- Committee, Asian Bioinformatics Research and Education Network (ABREN), 2006 2007
- Organizer, Mini-Workshop on Microbial Systems Biology, National Yang-Ming University, March $16-17,\,2006$
- Organization Committee, The Fourth Asia Pacific Bioinformatics Conference (APBC2006), February, 13-16, 2006, Taipei, Taiwan
- Session Chair, International Symposium on Grid Computing 2005 (ISGC2005), Taipei, Taiwan, April 25 – 29, 2005
- Co-organizer, 2005 Systems Biology and Bioinformatics Symposium and Workshop (SBBS05),
   Taipei, Taiwan, March 29 31, 2005
- Organization Committee, Bioinformatics in Taiwan 2004 (BIT2004), Taipei, Taiwan, September 9-11, 2004
- Guide Committee, Bioinformatics and Systems Biology Education Center, MOE Advanced Biotechnology Education Program, 2005 2009

#### • Invited Talks

#### International:

- 1. "MicroRNA Regulation in Human Protein Interaction Network", The 2014 EITA Conference on New Media and Biomedical Research, Cambridge, Massachusetts, July 31 August 1, 2014
- 2. "MicroRNA Regulation in Human Protein Interaction Network", The First BMIRC International Symposium on Frontiers in Computational Systems Biology and Bioengineering, Iizuka, Fukuoka, Japan, February 28 March 1, 2013
- 3. "Revealing Biological Contexts in Singed Molecular Network, The 12th Emerging Information and Technology Conference, Toronto, Canada, August 16 17, 2012
- 4. "Linking Clustering Reveals Biological Contexts in Signed Molecular Networks", The 10th InCoB and 1st ISCB-Asia Joint Conference 2011, Kuala Lumpur, Malaysia, November 30 December 2, 2011
- 5. "MicroRNA Regulation in Human Protein Interaction Network", The Human Proteome Organisation 9th Annual World Congress (HUPO2010), Sydney, Australia, September 19 23, 2010
- 6. "Finding Disease Related Modules in Co-Expressed Protein Interaction Networks", The 9th Emerging Information and Technology Conference (EITC2009), Massachusetts Institute of Technology, Cambridge, MA, USA, August 6 7, 2009
- 7. "Comparative Analysis of Co-expressed Protein Interaction Networks", Westlake Conference for Personalized Medicine, Hangzhou, China, May 29–31, 2009
- 8. "Standards and Databases for Biological Network Modeling", KHUPO 9th Annual International Proteomics Conference, Seoul, Korea, March 25–27, 2009
- 9. "MicroRNA Regulated Protein Interaction Network", International Symposium on Systems Bioinformatics, Ewha Womans University, Seoul, Korea, November 12, 2008
- 10. "MicroRNA Regulated Protein Interaction Network", The 9th International Conference of Korean Society for Bioinformatics and Systems Biology (KSBSB) (BIOINFO 2008), Chungbuk National University, Korea, November 13-14, 2008
- 11. "MicroRNA-Regulated Protein Interaction Network", Institute for Advanced Biosciences, Keio University, Tsuruoka, Japan, June 23, 2008
- 12. "Essential Core in Protein Interaction Network", The 16th Korea Genome Organization Conferece, Seoul, Korea, September 13 14, 2007
- 13. "Network biology of essential genes", Department of Bioscience and Bioinformatics, Kyushu Institute of Technology, Iizuka, Japan, January 30, 2007

- 14. "Network characteristics of essential genes in E. coli", The 7th International Conference of Korean Society for Bioinformatics (BIOINFO 2006), Pohang, Korea, September 14 16, 2006
- 15. "Identification of RNA-Binding Protein Residues Using Machine Learning Approaches", Graduate School of Biological Sciences, Nara Institute of Science and Technology, Nara, Japan, August 25, 2006
- 16. "Topological Similarity of Protein Interaction Network and its Correlation with Gene Expression Profiles", The Fifth Emerging Information Technology Conference (EITC2006), Dallas, Texas, August 10-12, 2006
- 17. "Systems Biology: Modeling of Biological Network", The First Virtual Training Workshop on Bioinformatics, May June, 2006 (an online course)
- 18. "Elucidating the Essentiality of Essential Genes", The First Japan-Taiwan Bilateral Symposium on Bioinformatics, Tokyo, Japan, March 13 15, 2006
- 19. "Systems Biology Study of a Novel Compound on Cancer Cells", First K.I.T. Bioinformatics Symposium, Iizuka, Japan, December 9-11, 2004
- 20. "Baryonic B Decays", 2003 International Europhysics Conference on High Energy Physics, Aachen, Germany, July 17 23, 2003
- 21. "Performance of a Small Angle BGO Calorimeter at Belle", The 10th International Conference on Calorimetry in High Energy Physics, Pasadena, USA, March 25 29, 2002
- 22. "Rare B Decays at Belle", XXXVIIth Rencontres de Moriond Electroweak Interactions and Unified Theories, Les Arcs, France, March 9 16, 2002
- 23. "Non-CP Physics Results from Belle", 2001 Aspen Winter Conference on Particle Physics, Aspen, Colorado, January 9 17, 2001

### Domestic:

- 1. "Biological Network Analysis for Understanding Life and Disease Mechanisms", NCTS Colloquium, National Center for Theoretical Sciences, Hsinchu, January 10, 2014
- 2. "Dissecting Human Protein Interaction Network via Phylogenetic Decomposition", The 18th Biophysics Conference, Academia Sinica, Taipei, June 27 29, 2013
- 3. "Dissecting Human Protein-Protein Interaction Network via Phylogenetic Decomposition", TIGP Bioinformatics Program, Academia Sinica, May 9, 2013
- 4. "Revealing Biological Contexts in Signed Molecular Networks", International Symposium on. Evolutionary Genomics and Bioinformatics, National Sun Yat-sen University, October 19-21, 2012
- "Revealing Biological Contexts in Signed Molecular Networks", Institute of Biomedical Informatics, National Yang-Ming University, March 18, 2012
- 6. "Revealing Biological Contexts in Signed Molecular Networks", 2012 Soft Matter and Biophysics Winter School, National Cheng Kung University, January 15-17, 2012
- 7. "Understanding Biology Through Computational Analysis of Complex Molecular Networks, School of Life Sciences, National Yang-Ming University, October 26, 2011
- 8. "Link Clustering Reveals Biological Contexts in Signed Molecular Networks", TIGP Bioinformatics Program, Academia Sinica, October 13, 2011
- 9. "Understanding Life Through Analysis of Complex Biological Networks", Graduate Institute of Applied Physics, National Chengchi University, April 25, 2011
- 10. "Network Biology Understanding Life Through Analysis of Complex Biological Networks", Department of Physics, National Central University, April 12, 2011

- 11. "MicroRNA Regulation in Protein Interaction Network", RNAi Symposium, Kaohsiung Medical University, March 26, 2011
- 12. "Finding Disease Modules in Human Protein Networks", Institute of Bioinformatics and Biosignal Transduction, National Cheng Kung University, March 18, 2011
- 13. "Network Biology Understanding Life Through Analysis of Complex Biological Networks", Institute of Physics, Academia Sinica, January 11, 2011
- 14. "Understanding Life Through Analysis of Complex Biological Networks", Center of Mathematical Modeling and Scientific Computing, National Chiao Tung University, November 11, 2010
- 15. "Finding Disease Modules in Protein Interaction Networks", 2010 NCTS September Workshop on Critical Phenomena and Complex Systems, Institute of Physics, Academia Sinica, Taipei, Taiwan, September 10–11, 2010
- 16. "Network Biology Understanding Life Through Analysis of Complex Biological Networks", Department of Physics, National Taiwan University, June 14, 2010
- 17. "MicroRNA Regulation in Human Protein Interaction Network", TIGP Bioinformatics Program, Academia Sinica, April 30, 2010
- 18. "Network Biology of MicroRNA Regulation", School of Life Sciences, National Yang-Ming University, April 28, 2010
- 19. "MicroRNA Regulation in Protein Interaction Network", NHRI, Taiwan, January 12, 2010
- 20. "Network Biology of MicroRNA Regulation", Department of Biotechnology and Laboratory Science in Medicine and Institute of Biotechnology in Medicine, National Yang-Ming University, December 4, 2009
- 21. "Finding Disease Modules in Co-expressed Protein Interaction Networks", Institute of Systems Biology and Bioinformatics, National Central University, Jhungli, Taiwan, October 22, 2009
- 22. "Finding Disease Modules in Co-expressed Protein Interaction Networks", The Seventh Symposium of Bioinformatics and Systems Biology in Taiwan (BIT2009), NYMU, Taipei, Taiwan, October 8 9, 2009
- 23. "Comparative Analysis of Co-expressed Protein Interaction Networks", High Throughput Screening Technology Symposium, NCKU, Tainan, Taiwan, October 1 2, 2009
- 24. "Finding Disease Related Modules in Co-expressed Protein Interaction Networks", Mini-Workshop on Systems Biology, NCTU, Hsinchu, Taiwan, June 18, 2009
- 25. "Predicting Essential Genes Based on Network and Sequence Analysis", 2009 AI Forum, JUST, Taipei, Taiwan, May 15–16, 2009
- 26. "Comparative Analysis of Co-expressed Protein Interaction Networks Reveals Disease Related Modules", Systems Biology Journal Club, Institute of Statistical Science, Academia Sinica, Taipei, Taiwan, April 22, 2009
- 27. "MicroRNA-Regulated Networks", 2009 Symposium of Taiwan Society for Bioinformatics and Systems Biology, NCTU, Hsinchu, Taiwan, March 5, 2009
- 28. "MicroRNA Regulation in Protein Interaction Network", The 7th International Conference of Bioinformatics (InCoB 2008), Taipei, Taiwan, October 20–22, 2008
- 29. "Biological Network Analysis", 2008 Workshop of Systems Biology and Soft Computing, NTU, Taipei, Taiwan, July 16–17, 2008
- 30. "MicroRNA Regulation in Protein Interaction Network", Department of Computer Science and Information Engineering & Institute of Medical Informatics, National Cheng Kung University, Tainan, Taiwan, May 9, 2008

- 31. "MicroRNA-Regulated Protein Interaction Network", Institute of Biomedical Informatics, National Yang-Ming University, Taipei, Taiwan, March 28, 2008
- 32. "MicroRNA-Regulated Protein Interaction Network", The First Japan-Taiwan Young Researchers Conference on Computational and Systems Biology, Hsinchu, Taiwan, March 9 11, 2008
- 33. "Network Biology of Essential Genes", Department of Chemical Engineering, National Taiwan University, May 23, 2007
- 34. "Predicting Essential Genes Based on Network and Sequence Analysis", 2nd Workshop on Systems Biology and Bioinformatics, National Central University, April 14 15, 2007
- 35. "Network Biology of Essential Genes", Institute of Zoology, National Taiwan University, March, 19, 2007
- 36. "Network Biology of Essential Genes", Biophysics and Soft-Matter Days 2007, Kenting, Taiwan, January 26 28, 2007
- 37. "Network Biology of Essential Genes in *E. coli*", 2007 Protein-Protein Interaction and Network Biology Workshop, Taipei, Taiwan, January 22, 2007
- 38. "Network Biology of Essential Genes", Institute of Systems Biology and Bioinformatics, National Central University, December 28, 2006
- 39. "Topological Similarity of Protein Interaction Network", The Second Taiwan-Japan Bilateral Symposium on Bioinformatics, Tainan, Taiwan, November 7 9, 2006
- 40. "Network Biology of Essential Genes", Institute of Physics, Academia Sinica, October 27, 2006
- 41. "Reconstruction of Gene Network and its Applications", Symposium for Systems Biology Virtual Laboratory and Genomics Approach to Chinese Medicine and Core Technology Training Course (III), Taipei Medical University, October 20 21, 2006
- 42. "Network characteristics of essential genes in  $E.\ coli^{\circ}$ , 11th Symposium on Recent Advances in Biophysics, Taipei, Taiwan, May 24-26, 2006
- 43. "Systems Biology A New Way of Doing Biology", Department of Physics, National Dong-Hua University, May 8, 2006
- 44. "Network Biology of Essential Genes in *E. coli*", Institute of Information Science, Academia Sinica, April 6, 2006
- 45. "Identification of RNA-Binding Protein Residues Using Machine Learning Approaches", Second Taiwan-India Functional Genomics Symposium, Taipei, Taiwan, March 3 4, 2006
- 46. "Systems Biology: Modeling of Biological Network", The Fourth Asia Pacific Bioinformatics Conference (APBC2006), February, 13-16, 2006, Taipei, Taiwan (a tutorial lecture)
- 47. "Systems Biology A New Way of Doing Biology", Department of Physics, Chung-Yuan Christian University, November 28, 2005
- 48. "Elucidating the Essentiality of Essential Genes", NCTS Symposium on Network Biology, Hsin-Chu, Taiwan, November 11, 2005
- 49. "Identification of RNA-Binding Protein Residues Using Machine Learning Approaches", Symposium and Workshop of Bioinformatics in Taiwan 2005 (BIT2005), Tainan, Taiwan, September 9 10, 2005
- 50. "Identification of RNA-Binding Protein Residues Using Machine Learning Approaches", The Fifth Emerging Information Technology Conference (EITC2005), Taipei, Taiwan, August 15 16, 2005
- 51. "Systems Biology Study of a Novel Drug cyclic RGD in Breast Cancer Cell MCF-7", Institute of Biochemistry, National Chung-Hsing University, April 22, 2005

- 52. "Systems Biology Study of a Novel Drug on Cancer Cells", Institute of Information Science, Academia Sinica, March 10, 2005
- 53. "A New Way of Doing Biology", 2005 Bioinformatics Symposium, National Taiwan University, January 18, 2005
- 54. "Proteome Analysis", Sixth Bioinformatics Workshop, National Chung-Cheng University, November 12, 2004
- 55. "Bioinformatics Applications in Systems Biology", Department of Computer Science and Information Engineering, National Taiwan University, April 16, 2004
- 56. "Proteomics Study of Cyclic RGD in Breast Cancer Cell Using Bioinformatics Techniques", Proteomics Symposium, National Central University, March 5, 2004
- 57. "Systems Biology Study of a Novel Drug cyclic RGD in Breast Cancer Cell MCF-7", Institute of Bioinformatics, National Yang-Ming University, February 18, 2004
- 58. "Three-body Hadronic B decays", Third International Workshop on B Physics and CP Violation, Taipei, Taiwan, September 29 October 1, 2003
- 59. "Observation of  $B \to \phi \phi K$ ", Department of Physics, National Taiwan University, March 10, 2003
- 60. "Discovery of Novel B Decays", Department of Physics, National Tsing-Hua University, February 25, 2003
- 61. "Belle Experiment Symmetry Breaking of Elementary Particles", Department of Physics, National Taiwan University, October 11, 2002
- 62. "Belle Experiment Symmetry Breaking of Elementary Particles", Department of Physics, Chung-Yuan Christian University, October 7, 2002
- 63. "Rare B decays at Belle", Second International Workshop on B Physics and CP Violation, Taipei, Taiwan, June  $7-9,\,2002$
- 64. "Rare B Meson Decays at Belle", Department of Physics, National Tsing-Hua University, April 22, 2002
- 65. "Color-suppressed  $B^0 \to D^0 h^0$  at Belle", Department of Physics, National Taiwan University, September 28, 2001

## • Grants

- "Integrative Network Analysis of Long Non-Coding RNA Modulation in ATP Stimulated Cancer Cells", 2014/8 – 2017/7, MOST
- "Modeling Dynamics of Regulatory Genome Complexity in Evolution and Development", 2013/8  $2014/10,\,\mathrm{NSC}$
- "Evolution of microRNA and transcription factor co-regulation", 2010/8 2013/10, NSC
- "Modeling of microRNA-Regulated Gene Network to Elucidate Cancer Cell Dynamics", 2009/1
   2012/12, NHRI
- "Computational Systems Biology Study of Escherichia coli", 2007/8 2010/10, NSC
- "Systems and Computational Biology of *Rhodopseudomonas palustris* Aimed for Bioenergy Application" Subproject 2: "Computational Systems Biology of *Rhodopseudomonas palustris*",  $2007/8-2010/10,\,\mathrm{NSC}$
- "Development of Shrimp Bioinformatics Platform and Database for Functional Genomics Study",  $2005/1-2008/12,\,\mathrm{COA}$

## • Teaching Experience

Systems Biology (2005 - 2014), Network Biology (2006 - 2014), Principles in Bioinformatics (2005 - 2014), Mathematical Biology (2008, 2011), Bioinformatics Programming (2005, 2011, 2012), Programming (2004), General Physics (2012 - 2014), Medical Physics (2009), Chemical Principles (2014), Genomics (2010 - 2014), Microarray Data Analysis (2007 - 2008), Computer Applications in Biology (2006, 2008 - 2009), Scientific Writing (2008 - 2014)

• Memberships: Taiwan Society of Evolution and Computational Biology, Taiwan Society for Bioinformatics and Systems Biology, Taiwan Proteomics Society, Biophysical Society of R.O.C., Taiwan Society for Biochemistry and Molecular Biology, Institute of Information & Computing Machinery, International Society for Computational Biology,

## **Publication List**

January 9, 2015

Hsuan-Cheng Huang

**Journal Papers:** (h-index: 43)

- 1. Integrating transcriptomics and proteomics to show that tanshinone IIA suppresses cell growth by blocking glucose metabolism in gastric cancer cells.

  Lin LL, Hsia CR, Hsu CL, Huang HC\*, Juan HF\*, BMC Genomics, in press.
- 2. Quantitative proteomics reveals middle infrared radiation-interfered networks in breast cancer cells.

Chang HY, Li MH, Huang TC, Hsu CL, Tsai SR, Lee SC\*, **Huang HC**\*, Juan HF\*, J. Proteome Res., in press.

3. Combination therapy targeting ectopic ATP synthase and 26S proteasome induces ER stress in breast cancer cells.

Chang HY, Huang TC, Chen NN, Huang HC\*, Juan HF\*, Cell Death and Disease, 5, e1540 (2014).

- 4. Dissecting the human protein-protein interaction network via phylogenetic decomposition. Chen CY, Ho A, Huang HY, Juan HF\*, Huang HC\*, Sci. Rep., 4, 7153 (2014).
- 5. MicroRNA-mediated networks underlie immune response regulation in papillary thyroid carcinoma.

Huang CT, Oyang YJ, **Huang HC**\*, Juan HF\*, Sci. Rep., **4**, 6495 (2014).

- 6. Mirin: Identifying microRNA regulatory modules in protein-protein interaction network. Yang KC, Hsu CL, Lin CC, Juan HF\*, Huang HC\*, Bioinformatics, **30**, 2527-8 (2014).
- 7. Deciphering molecular determinants of chemotherapy in gastrointestinal malignancy using systems biology approaches.

Lin LL, **Huang HC**\*, Juan HF\*, Drug Discovery Today, **19**, 1402-1409 (2014).

8. Aryl hydrocarbon receptor downregulates MYCN expression and promotes cell differentiation of neuroblastoma.

Wu PY, Liao YF, Juan HF, **Huang HC**, Wang BJ, Lu YL, Yu IS, Shih YY, Jeng YM, Hsu WM, Lee H, PLoS ONE, **9**, e88795 (2014).

9. Quantitative proteomic analysis of human lung tumor xenografts treated with the ectopic ATP synthase inhibitor citreoviridin.

Wu YH, Hu CW, Chien CW, Chen YJ, Huang HC\*, Juan HF, PLoS ONE, 8, e70642 (2013).

10. Quantitative Proteomics Reveals Diverse Roles of miR-148a from Gastric Cancer Progression to Neurological Development.

Hu CW, Tseng CW, Chien CW, **Huang HC**, Ku WC, Lee SJ, Chen YJ, Juan HF, J. Proteome Res., **12**, 3993-4004 (2013).

11. Identification of microRNA 395a in 24-epibrassinolide-regulated root growth of *Arabidopsis* thaliana using microRNA arrays.

Lin LL, Wu CC, Huang HC\*, Chen HJ, Hsieh HL\*, Juan HF\*, Int. J. Mol. Sci., 14, 14270-86 (2013).

12. Link clustering reveals structural characteristics and biological contexts in signed molecular networks.

Lin CC, Lee CH, Fuh CS, Juan HF\*, **Huang HC**\*, PLoS ONE, **8**, e67089 (2013).

13. Comprehensive methylome analysis of ovarian tumors reveals hedgehog signaling pathway regulators as prognostic DNA methylation biomarkers.

Huang RL, Gu F, Kirma NB, Ruan J, Chen CL, Wang HC, Liao YP, Chang CC, Yu MH, Pilrose JM, Thompson IM, **Huang HC**, Huang TH, Lai HC, Nephew KP, Epigenetics, **8**, 624-34 (2013).

14. MicroRNA-regulated protein-protein interaction networks and their functions in breast cancer.

Lee CH, Kuo WH, Lin CC, Oyang YJ, Huang HC\*, Juan HF\*, Int. J. Mol. Sci., 14, 11560-606 (2013).

- 15. Anatomical and transcriptional dynamics of maize embryonic leaves during seed germination.
  - Liu WY, Chang YM, Chen SC, Lu CH, Wu YH, Lu MY, Chen DR, Shih AC, Sheue CR, **Huang HC**, Yu CP, Lin HH, Shiu SH, Ku MSB, Li WH, Proc. Natl. Acad. Sci. USA, **110**, 3979-84 (2013).
- 16. Differential microRNA regulation correlates with alternative polyadenylation pattern between breast cancer and normal cells.

  Liao HH, CC Lin, Juan HF\*, **Huang HC\***, PLoS ONE, **8**, e56958 (2013).
- 17. Middle infrared radiation induces  $G_2/M$  cell cycle arrest in A549 lung cancer cells. Chang HY, Shih MH, Huang HC, Tsai SR, Juan HF, Lee SC, PLoS ONE, 8, e54117 (2013).
- 18. ValidNESs: a database of validated leucine-rich nuclear export signals. Fu SC, Huang HC, Horton P, Juan HF, Nucleic Acids Res., 41, D338-D343 (2013).
- 19. Lengthening of 3'UTR increases with morphological complexity in animal evolution. Chen CY, Chen ST, Juan HF\*, Huang HC\*, Bioinformatics, 28, 3178-81 (2012). [ESI 2013 Highly Cited Papers]
- 20. Phosphoproteomic analysis of *Rhodopseudomonas palustris* reveals the role of pyruvate phosphate dikinase phosphorylation in lipid production.

  Hu CW, Lin MH, **Huang HC**, Ku WC, Yi TH, Tsai CF, Chen YJ, Sugiyama N, Ishihama Y, Juan HF, Wu SH, J. Proteome Res., **11**, 5362-75 (2012).
- 21. Revealing the molecular mechanism of gastric cancer marker annexin A4 in cancer cell proliferation using exon arrays.

  Lin LL, Huang HC\*, Juan HF\*, PLoS ONE, 7, e44615 (2012).
- 22. Helicobacter pylori disrupts host cell membranes, initiating a repair response and cell proliferation.
  Lin LL, Huang HC, Ogihara S, Wang JT, Wu MC, McNeil PL, Chen CN, Juan HF, Int. J. Mol. Sci., 13, 10176-92 (2012).
- 23. Profiling lipid-protein interactions using non-quenched fluorescent liposomal nanovesicles and proteome microarrays.
  Lu KY, Tao SC, Yang TC, Ho YH, Lee CH, Lin CC, Juan HF, Huang HC, Yang CY, Chen MS, Lin YY, Lu JY, Zhu H, Chen CS, Mol. Cell. Proteomics, 11, 1177-90 (2012).
- 24. Ectopic ATP synthase blockade suppresses lung adenocarcinoma growth by activating the unfolded protein response.

  Chang HY, Huang HC, Huang TC, Yang PC, Wang YC, Juan HF, Cancer Res. 72, 4696-4706 (2012).
- 25. Methylomic Analysis Identifies Frequent DNA Methylation of Zinc Finger Protein 582 (ZNF582) in Cervical Neoplasms.
  Huang RL, Chang CC, Su PH, Chen YC, Liao YP, Wang HC, Yo YT, Chao TK, Huang HC, Lin CY, Chu TY, Lai HC, PLoS ONE, 7, e41060 (2012).
- 26. Revealing the anti-tumor effect of artificial miRNA p-27-5p on human breast carcinoma cell line T-47D.
  Tseng CW, Huang HC, Shih AC, Chang YY, Hsu CC, Chang JY, Juan HF, Li WH, Int. J. Mol. Sci., 13, 6352-69 (2012).
- 27. Discovery of biomarkers for gastric cancer: a proteomics approach. Lin LL, Huang HC\*, Juan HF\*, J. Proteomics, 75, 3081-97 (2012).
- 28. Crosstalk between transcription factors and microRNAs in human protein interaction network.
  Lin CC, Chen YJ, Chen CY, Oyang YJ, Juan HF\*, Huang HC\*, BMC Syst. Biol., 6, 18 (2012). [Highly accessed; Cited ≥ 15]
- 29. The androgen pathway stimulates microRNA-216a transcription to suppress the TSLC1 tumor suppressor gene in early hepatocarcinogenesis.

  Chen PJ, Yeh SH, Liu WH, Lin CC, Huang HC, Chen CL, Chen DS, Chen PJ, Hepatology, 56, 632-43 (2012).

- 30. Revealing the Functions of the Transketolase Enzyme Isoforms in *Rhodopseudomonas palustris* Using a Systems Biology Approach.
  - Hu CW, Chang YL, Chen SJ, Kuo-Huang LL, Liao JC, **Huang HC**\*, Juan HF\*, PLoS ONE, **6**, e28329 (2011).
- 31. Silencing of miR-124 induces neuroblastoma SK-N-SH cell differentiation, cell cycle arrest and apoptosis through promoting AHR.
  - Huang TC, Chang HY, Chen CY, Wu PY, Lee H, Liao YF, Hsu WM\*, **Huang HC**\*, Juan HF\*, FEBS Lett., **585**, 3582-6 (2011).
- 32. The effect of narrow bandwidth infrared radiation on the growth of *Escherichia coli*. Tsai SR, Huang TC, Liang CM, Chang HY, Chang YT, **Huang HC**, Juan HF\*, Lee SC\*, Appl. Phys. Lett., **99**, 163704 (2011).
- 33. Reviewing ligand-based rational drug design: the search for an ATP synthase inhibitor. Lee CH, Huang HC\*, Juan HF\*, Int. J. Mol. Sci., 12, 5304-5318 (2011).
- 34. Integrative network analysis reveals active microRNAs and their functions in gastric cancer. Tseng CW, Lin CC, Chen CN, Huang  $HC^*$ , Juan HF\*, BMC Syst. Biol., **5**, 99 (2011). [Highly accessed; Cited  $\geq 23$ ]
- 35. Identification of 14-3-3 $\beta$  in human gastric cancer cells and its potency as a diagnostic and prognostic biomarker.
  - Tseng CW, Yang JC, Chen CN\*, **Huang HC**, Chuang KN, Lin CC, Lai HS, Lee PH, Chang KJ, Juan HF\*, Proteomics, **11**, 2423-39 (2011).
- 36. Coregulation of transcription factors and microRNAs in human transcriptional regulatory network.
  - Chen CY, Chen ST, Fuh CS, Juan HF\*, **Huang HC**\*, BMC Bioinformatics, **12** (Suppl 1), S41 (2011). [ESI 2013 **Highly Cited Papers**; Cited  $\geq 23$ ]
- 37. Dynamic functional modules in co-expressed protein interaction networks of dilated cardiomyopathy.
  - Lin CC, Hsiang JT, Wu CY, Oyang YJ, Juan HF\*, **Huang HC**\*, BMC Syst. Biol., 4, 138 (2010). [Cited > 13]
- 38. Modularity of *Escherichia coli* sRNA regulation revealed by sRNA-targets and protein network analysis.
  - Wu TH, Chang IYF, Chu LCJ, Huang HC\*, Ng WV\*, BMC Bioinformatics, 11 (Suppl 7), S11 (2010).
- 39. Ganoderma lucidum polysaccharides induce macrophage-like differentiation in human leukemia THP-1 cells via caspase and p53 activation.
  - Hsu JW, Huang HC, Lee TY, Chen ST, Wong CH, Juan HF, Evid.-based Complement Altern. Med., 2011, 358711 (2011).
- 40. Predicting essential genes based on network and sequence analysis.
  - Hwang YC, Lin CC, Chang JY, Mori H, Juan HF\*, **Huang HC**\*, Mol. BioSyst., **5**, 1672–1678 (2009). [Cited  $\geq 20$ ]
- 41. Essential core of protein-protein interaction network in Escherichia coli.
  - Lin CC, Juan HF, Hsiang JT, Hwang YC, Mori H\*, **Huang HC**\*, J. Proteome Res., **8**, 1925–1931 (2009). [Cited  $\geq 11$ ]
- 42. Characterization of microRNA-regulated protein-protein interaction network. Hsu CW, Juan HF\*, Huang HC\*, Proteomics, 8, 1975–1979 (2008). [Cited > 52]
- 43. TCMGeneDIT: a database for associated traditional Chinese medicine, gene and disease information using text mining.
  - Fang YC, Huang HC, Chen HH, Juan HF, BMC Complement Altern Med, 8, 58 (2008). [Cited  $\geq 25$ ]
- 44. Comparison and Identification of Estrogen-Receptor Related Gene Expression Profiles in Breast Cancer of Different Ethnic Origins.
  - Chen, H.-W.<sup>†</sup>, **Huang, H.-C.**<sup>†</sup>, Lin, Y.-S., Chang, K.-J., Kuo, W.-H., Hwa, H.-L., Hsieh, F.-J.\*, Juan, H.-F.\*, Breast Cancer: Basic and Clinical Research, 1, 35-49 (2008).
- 45. MeInfoText: associated gene methylation and cancer information from text mining. Fang YC, Huang HC\*, Juan HF\*, BMC Bioinformatics, 9, 22 (2008). [Highly accessed; Cited ≥ 11]

- 46. Ganoderma lucidum polysaccharides in human monocytic leukemia cells: from gene expression to network construction.
  - Cheng KC<sup>†</sup>, **Huang HC**<sup>†</sup>, Chen JH, Hsu JW, Cheng HC, Ou CH, Yang WB, Chen ST, Wong CH, Juan HF\*, BMC Genomics, **8**, 411 (2007). [Highly accessed; Cited  $\geq 18$ ]
- 47. An Apoptosis-related Gene Network Induced by Novel Compound cRGD in Human Breast Cancer Cells.
  - Huang TC, **Huang HC**, Chang CC, Chang HY, Ou CH, Hsu CH, Chen ST, Juan HF\*, FEBS Lett., **581**, 3517-22 (2007).
- 48. Comparative analysis of differentially expressed genes in normal and white spot syndrome virus infected Penaeus monodon.
  - Leu JH<sup>†</sup>, Chang CC<sup>†</sup>, Wu JL, Hsu CW, Hirono I, Aoki T, Juan HF, Lo CF, Kou GH\*, **Huang HC**\*, BMC Genomics, **8**, 120 (2007). [Highly accessed; Cited  $\geq 55$ ]
- 49. Lipopolysaccharide-stimulated responses in rat aortic endothelial cells by a systems biology approach.
  - Tseng, H.-W., Juan, H.-F., **Huang, H.-C.**, Chen, C.-F., Chen, S.-T.\*, Wang, G.-J.\*, Proteomics, **6**, 5915-5928 (2006).
- 50. Quantitative proteomic and genomic profiling reveals metastasis-related protein expression patterns in gastric cancer cells.
  - Chen YR, Juan HF, **Huang HC**, Huang HH, Lee YJ, Lio MY, Tseng CW, Lin LL, Chen JY, Wang MJ, Chen JH\*, Chen YJ\*, J. Proteome Res. 5, 2727-2742 (2006). [Cited  $\geq 47$ ]
- 51. Large-scale identification of protein-protein interaction of Escherichia coli K-12.

  M. Arifuzzaman1, M. Maeda, A. Itoh, K. Nishikata, C. Takita, R. Saito, T. Ara, K. Nakahigashi, H.-C. Huang, A. Hirai, K. Tsuzuki, S. Nakamura, M. Altaf-Ul-Amin, T. Oshima, T. Baba, N. Yamamoto, T. Kawamura, T. Ioka-Nakamichi, M. Kitagawa, M. Tomita, S. Kanaya, C. Wada, H. Mori\*, Genome Res. 16, 686-91 (2006). [Cited ≥ 219]
- 52. Proteomics analysis of a novel compound cyclic RGD in breast carcinoma cell line MCF-7. Juan, H.-F.\*, Wang, I-H., Huang, T.-C., Li, J.-J., Chen, S.-T., Huang, H.-C.\*, Proteomics, 11, 2991-3000 (2006). [Cover picture]
- 53. An agent-based system to discover protein-protein interactions, identify protein complexes and proteins with multiple peptide mass fingerprints.

  Lee, T.-Y., Horng, J.-T.\*, Juan, H.-F., Huang, H.-D., Wu, L.-C., Lin, F.-M., Huang, H.-C., J. Comput.
- 54. A new application of microwave technology to proteomics.

  Juan, H.-F.\*, Chang, S.-C., Huang, H.-C., Chen, S.-T., Proteomics 5, 840-842 (2005). [Cited  $\geq 65$ ]

Chem, **27**, 1020-32 (2006).

- 55. GeneNetwork: an interactive interface for reconstructing genetic network based on microarray data.
- C.C. Wu, **H.C. Huang**\*, H.F. Juan, S.T. Chen\*, Bioinformatics **20**, 3691-3693 (2004). [Cited  $\geq 38$ ]
- 56. Small molecules targeting severe acute respiratory syndrome human coronavirus. C.Y. Wu, J.T. Jan\*, S.H. Ma, C.J. Kuo, H.F. Juan, Y.S.E. Cheng, H.H. Hsu, **H.C. Huang**, D. Wu, A. Brik, F.S. Liang, R.S. Liu, J.M. Fang, S.T. Chen, P.H. Liang, C.H. Wong\*, Proc. Natl. Acad. Sci. USA **101**, 10012-10017 (2004). [Cited ≥ 139]
- 57. ProteMiner-SSM: a web server for efficient analysis of similar protein tertiary substructures. Chang DT, Chen CY, Chung WC, Oyang YJ\*, Juan HF, Huang HC, Nucleic Acids Res. 32, W76-82 (2004).
- 58. Evidence for  $B \to \phi \phi K$ .
  Belle Collaboration, **H.-C. Huang**\* *et al.*, Phys. Rev. Lett. **91**, 241802 (2003). [Cited  $\geq 10$ ]
- 59. Observation of  $B^{\pm} \to \omega K^{\pm}$  Decay. Belle Collaboration, R.-S. Lu *et al.*, Phys. Rev. Lett. **89**, 191801 (2002). [corresponding author]
- 60. Measurements of branching fractions and CP asymmetries in  $B \to \eta h$  decays. Belle Collaboration, P. Chang *et al.*, Phys. Rev. D **71**, 091106 (2005).
- 61. Observation of  $B^+ \to p\overline{p}\pi^+$ ,  $B^0 \to p\overline{p}K^0$ , and  $B^+ \to p\overline{p}K^{*+}$ . Belle Collaboration, M.-Z. Wang, et al., Phys. Rev. Lett. **92**, 131801 (2004). [Cited  $\geq 50$ ]

- 62. First measurement of the *T*-violating muon polarization in the decay  $K^+ \to \mu^+ \nu \gamma$ . KEK-E246 Collaboration, V.V. Anisimovsky *et al.*, Phys. Lett. **B562**, 166 (2003).
- 63. The Belle detector.

  Belle Collaboration, A. Abashian *et al.*, Nucl. Instr. and Meth. **A479**, 117 (2002). [Cited ≥ 808]
- 64. Observation of  $B^{\pm} \to p\overline{p}K^{\pm}$ . Belle Collaboration, K. Abe *et al.*, Phys. Rev. Lett. **88**, 181803 (2002). [*Equal contribution* to the corresponding author; Cited  $\geq 74$ ]
- 65. Observation of the Color-Suppressed Decay  $\overline{B}{}^0 \to D^0 \pi^0$ . Belle Collaboration, K. Abe *et al.*, Phys. Rev. Lett. **88**, 052002 (2002). [*Equal contribution* to the corresponding author; Cited  $\geq 81$ ]
- 66. Measurement of the branching fraction for  $B \to \eta' K$  and search for  $B \to \eta' \pi^+$ . Belle Collaboration, K. Abe *et al.*, Phys. Lett. **B517**, 309 (2001). [Cited  $\geq 57$ ]
- 67. Evidence for direct CP violation in  $B^0 \to K^+\pi^-$  decays. Belle Collaboration, Y. Chao, et al., Phys. Rev. Lett. **93**, 191802 (2004).
- 68. Evidence for  $B^+ \to \omega \ell^+ \nu$ .
  Belle Collaboration, C. Schwanda, et al., Phys. Rev. Lett. **93**, 131803 (2004).
- 69. Search for the Lepton-Flavor-Violating Decay  $\tau^- \to \mu^- \eta$  at Belle. Belle Collaboration, Y. Enari, et al., Phys. Rev. Lett. **93**, 081803 (2004).
- 70. Observation of  $B^+ \to \psi(3770)K^+$ . Belle Collaboration, R. Chistov *et al.*, Phys. Rev. Lett. **93**, 051803 (2004).
- 71. Observation of Large CP Violation and Evidence for Direct CP Violation in  $B^0 \to \pi^+\pi$  Decays. Belle Collaboration, K. Abe et al., Phys. Rev. Lett. **93**, 021601 (2004).
- 72. Study of  $B^- \to D^{**0}\pi^-(D^{**0} \to D^{(*)+}\pi^-)$  decays. Belle Collaboration, K. Abe *et al.*, Phys. Rev. D **69**, 112002 (2004). [Cited  $\geq 170$ ]
- 73. Improved measurements of the branching fractions for  $B \to Kpi$ ,  $\pi\pi$ , and  $K\overline{K}$  decays. Belle Collaboration, Y. Chao et al., Phys. Rev. D **69**, 111102(R) (2004).
- 74. Upper Bound on the Decay  $\tau \to \mu \gamma$  from the Belle Detector. Belle Collaboration, K. Abe et al., Phys. Rev. Lett. **92**, 171802 (2004).
- 75. Observation of Radiative Decay  $D^0 \to \phi \gamma$ . Belle Collaboration, O. Tajima, et al., Phys. Rev. Lett. **92**, 101803 (2004).
- 76. Measurement of  $|V_{ub}|$  using inclusive  $B \to X_u \ell \nu$  decays with a novel  $X_u$ -reconstruction method. Belle Collaboration, H. Kakuno, et al., Phys. Rev. Lett. **92**, 101801 (2004).
- 77. Observation of radiative  $B \to \phi K \gamma$  decays. Belle Collaboration, A. Drutskoy, et al., Phys. Rev. Lett. **92**, 051801 (2004).
- 78. Measurements of the  $D_{sJ}$  resonance properties. Belle Collaboration, Y. Mikami, et al., Phys. Rev. Lett. 92, 012002 (2004). [Cited  $\geq$  119]
- 79. Search for  $B^- \to J/\psi \Lambda \overline{p}$  decay. Belle Collaboration, S.L. Zang, et al., Phys. Rev. D **69**, 017101 (2004).
- 80. Measurement of  $K^+K^-$  production in two-photon collisions in the resonant-mass region. Belle Collaboration, K. Abe et al., Eur. Phys. J. C **32**, 323 (2004).
- 81. Study of B meson decays to three-body charmless hadronic final states. Belle Collaboration, A. Garmash, et al., Phys. Rev. D 69, 012001 (2004).
- 82. Observation of  $B \to K^* \ell^+ \ell^-$ . Belle Collaboration, A. Ishikawa, et al., Phys. Rev. Lett. **91**, 261601 (2003).
- 83. Observation of a narrow charmonium-like state in exclusive  $B^+ \to K^+\pi^+\pi^- J/\psi$  decays. Belle Collaboration, S.-K. Choi, et al., Phys. Rev. Lett. **91**, 262001 (2003). [Cited  $\geq 569$ ]

- 84. Evidence for  $B^0 \to \pi^0 \pi^0$ . Belle Collaboration, S.H. Lee, et al., Phys. Rev. Lett. **91** 261801 (2003).
- 85. Search for  $B^0 \to \ell^+\ell^-$  at Belle. Belle Collaboration, M.-C. Chang, et al., Phys. Rev. D **68**, 111101(R) (2003).
- 86. Measurement of Time-Dependent CP-Violating Asymmetries in B<sup>0</sup> → φK<sup>0</sup><sub>S</sub>, K<sup>+</sup>K<sup>-</sup>K<sup>0</sup><sub>S</sub>, and η'K<sup>0</sup><sub>S</sub> Decays.
  Belle Collaboration, K. Abe et al., Phys. Rev. Lett. 91, 261602 (2003).
- 87. Observation of the  $D_{sJ}(2317)$  and  $D_{sJ}(2457)$  in B decays. Belle Collaboration, P. Krokovny, et al., Phys. Rev. Lett. **91**, 262002 (2003). [Cited  $\geq 185$ ]
- 88. Observation of  $B^+ \to \rho^+ \rho^0$ . Belle Collaboration, J. Zhang, et al., Phys. Rev. Lett. **91**, 221801 (2003).
- 89. Measurement of Branching Fractions and Polarization in  $B \to \phi K^{(*)}$  Decays. Belle Collaboration, K.-F. Chen, et al., Phys. Rev. Lett. **91**, 201801 (2003).
- 90. Improved Measurement of the Partial-Rate CP Asymmetry in  $B^+ \to K^0 \pi^+$  and  $B^- \to \overline{K}^0 \pi^-$  Decays. Belle Collaboration, Y. Unno, K. Suzuki, et al., Phys. Rev. D **68**, 011103 (2003).
- 91. Measurement of Branching Fraction Ratios and CP Asymmetries in  $B^{\pm} \to D_{CP}K^{\pm}$ . Belle Collaboration, S.K. Swain, T.E. Browder, et al., Phys. Rev. D **68**, 051101 (2003).
- 92. Observation of  $B^0 \to p\overline{\Lambda}\pi^-$ . Belle Collaboration, M.-Z. Wang, et al., Phys. Rev. Lett. **90**, 201802 (2003).
- 93. Evidence for CP-Violating Asymmetries in  $B^0 \to \pi^+\pi^-$  Decays and Constraints on the CKM Angle  $\phi_2$ . Belle Collaboration, K. Abe et al., Phys. Rev. D **68**, 012001 (2003).
- 94. Observation of  $\overline{B}{}^0 \to D^0 \overline{K}{}^0$  and  $\overline{B}{}^0 \to D^0 \overline{K}{}^{*0}$  Decays. Belle Collaboration, P. Krokovny *et al.*, Phys. Rev. Lett. **90**, 141802 (2003).
- 95. Study of Time-Dependent CP-Violating Asymmetries in  $b \to sq\overline{q}$  Decays. Belle Collaboration, K. Abe et al., Phys. Rev. D **67**, 031102(R) (2003).
- 96. Studies of  $B^0$ - $\overline{B}{}^0$  Mixing Properties with Inclusive Dilepton Events. Belle Collaboration, N. C. Hastings et al., Phys. Rev. D 67, 052004 (2003).
- 97. Observation of  $\overline B{}^0 \to \Lambda_c \overline p$  Decay. Belle Collaboration, N. Gabyshev *et al.*, Phys. Rev. Lett. **90**, 121802 (2003).
- 98. Measurement of the  $B^0$ - $\overline{B}^0$  Mixing Rate with  $B^0(\overline{B}^0) \to D^{*\mp}\pi^{\pm}$  Partial Reconstruction. Belle Collaboration, Y. Zheng et al., Phys. Rev. D **67**, 092004 (2003).
- Measurement of Branching Fractions and Charge Asymmetries for Two-Body B Meson Decays with Charmonium.
   Belle Collaboration, K. Abe et al., Phys. Rev. D 67, 032003 (2003).
- 100. Study of  $\overline{B}^0 \to D^{(*)0}\pi^+\pi^-$  Decays. Belle Collaboration, A. Satpathy *et al.*, Phys. Lett. **B553**, 159 (2003).
- Search for the Electric Dipole Moment of the τ Lepton.
   Belle Collaboration, K. Inami et al., Phys. Lett. B55, 16 (2003).
- 102. Measurement of Branching Fractions for  $B \to \eta_c K^{(*)}$  Decays. Belle Collaboration, F. Fang et al., Phys. Rev. Lett. **90**, 071801 (2003).
- 103. Measurement of the Electroweak Penguin Process  $B \to X_s \ell^+ \ell^-$ . Belle Collaboration, J. Kaneko *et al.*, Phys. Rev. Lett. **90**, 021801 (2003).
- 104. Studies of the Decay  $B^{\pm} \to D_{CP} K^{\pm}$ . Belle Collaboration, K. Abe *et al.*, Phys. Rev. Lett. **90**, 131803 (2003).
- 105. Study of Exclusive B decays to Charmed Baryons at Belle.

  Belle Collaboration, N. Gabyshev et al., Phys. Rev. D 66, 091102(R) (2002).

- 106. Measurement of the Inclusive Semileptonic Branching Fraction of B Mesons and  $|V_{cb}|$ . Belle Collaboration, K. Abe et al., Phys. Lett. **B547**, 181 (2002).
- 107. Improved Measurement of Mixing-induced CP Violation in the Neutral B Meson System. Belle Collaboration, K. Abe et al., Phys. Rev. D 66, 071102(R) (2002). [Cited  $\geq 218$ ]
- 108. Charmless Hadronic Two-Body B Meson Decays.

  Belle Collaboration, B.C.K. Casey et al., Phys. Rev. D 66, 092002 (2002).
- 109. Observation of  $D_s^+K^-$  and Evidence for  $D_s^+\pi^-$  Final States in Neutral B Decays. Belle Collaboration, P. Krokovny et al., Phys. Rev. Lett. **89**, 231804 (2002).
- 110. Mesurement of the  $B^0 \overline{B}^0$  Mixing Parameter  $\Delta m_d$  using Semileptonic  $B^0$  Decays. Belle Collaboration, K. Hara et al., Phys. Rev. Lett. 89, 251803 (2002).
- 111. Observation of  $B \to D^{(*)}K^-K^{0(*)}$  Decays. Belle Collaboration, A. Drutskoy et al., Phys. Lett. **B542**, 171 (2002).
- 112. Measurement of CP-Violating Parameters in  $B \to \eta' K$  Decays. Belle Collaboration, K.-F. Chen et al., Phys. Lett. **B546**, 196 (2002).
- 113. Measurement of the Oscillation Frequency for  $B^0 \overline{B}{}^0$  Mixing using Hadronic  $B^0$  Decays. Belle Collaboration, K. Abe et al., Phys. Lett. **B542**, 207 (2002).
- 114. Study of  $B \to \rho \pi$  Decays at Belle. Belle Collaboration, A. Gordon et al., Phys. Lett. **B542**, 183 (2002).
- 115. Observation of the Decay  $B^0 \to D^+D^{*-}$ . Belle Collaboration, K. Abe *et al.*, Phys. Rev. Lett. **89**, 122001 (2002).
- 116. Observation of the  $\eta_c(2S)$  in Exclusive  $B \to KK_SK^-\pi^+$  Decays. Belle Collaboration, S.-K. Choi et al., Phys. Rev. Lett. 89, 102001 (2002). [Cited  $\geq 130$ ]
- 117. Observation of Double  $c\bar{c}$  Production at  $e^+e^-$  Annihilation at  $\sqrt{s} \approx 10.6$  GeV. Belle Collaboration, K. Abe et al., Phys. Rev. Lett. 89, 142001 (2002). [Cited  $\geq 233$ ]
- 118. Measurement of  $\chi_{c2}$  Production in Two-Photon Collisions. Belle Collaboration, K. Abe *et al.*, Phys. Lett. **B540**, 33 (2002).
- 119. Observation of  $\overline B{}^0 \to D^{(*)0} p \overline p$ . Belle Collaboration, K. Abe *et al.*, Phys. Rev. Lett. **89**, 151802 (2002).
- 120. Radiative B Meson Decays into  $K\pi\gamma$  and  $K\pi\pi\gamma$  Final States. Belle Collaboration, K. Abe et al., Phys. Rev. Lett. **89**, 231801 (2002).
- 121. Measurements of Branching Fractions and Decay Amplitudes in  $B \to J/\psi K^*$  Decays. Belle Collaboration, K. Abe et al., Phys. Lett. **B538**, 11 (2002).
- 122. Study of CP-Violating Asymmetries in  $B^0 \to \pi^+\pi^-$  Decays. Belle Collaboration, K. Abe et al., Phys. Rev. Lett. 89, 071801 (2002).
- 123. Search for Charmless Two-body Baryonic Decays of B Mesons. Belle Collaboration, K. Abe et al., Phys. Rev. D 65, 091103(R) (2002).
- 124. Observation of  $\chi_{c2}$  Production in B-meson Decay. Belle Collaboration, K. Abe *et al.*, Phys. Rev. Lett. **89**, 011803 (2002).
- 125. Observation of Mixing-induced CP Violation in the Neutral B Meson System. Belle Collaboration, K. Abe et al., Phys. Rev. D 66, 032007 (2002).
- 126. Precise Measurement of B Meson Lifetimes with Hadronic Final States. Belle Collaboration, K. Abe et al., Phys. Rev. Lett. 88, 171801 (2002).
- 127. Study of Three-body Charmless B Decays.
  Belle Collaboration, A. Garmash et al., Phys. Rev. D 65, 092005 (2002).
- 128. Measurement of  $\mathcal{B}(\bar{B} \to D^+ l^- \bar{\nu})$  and Determination of  $|V_{cb}|$ . Belle Collaboration, K. Abe *et al.*, Phys. Lett. **B526**, 258 (2002).

- 129. Determination of  $|V_{cb}|$  using the semileptonic decay  $\bar{B}^0 \to D^{*+}e^-\bar{\nu}$ . Belle Collaboration, K. Abe *et al.*, Phys. Lett. **B526**, 247 (2002).
- 130. Measurement of the Lifetime Difference in D<sup>0</sup> Meson Decays. Belle Collaboration, K. Abe et al., Phys. Rev. Lett. 88, 162001 (2002).
- 131. Observation of  $B^+ \to \chi_{c0} K^+$ . Belle Collaboration, K. Abe *et al.*, Phys. Rev. Lett. **88**, 031802 (2002).
- 132. Production of Prompt Charmonia in  $e^+e^-$  Annihilation at  $\sqrt{s} \approx 10.6$  GeV. Belle Collaboration, K. Abe et al., Phys. Rev. Lett. 88, 052001 (2002).
- 133. Observation of the Decay  $B \to K l^+ l^-$ . Belle Collaboration, K. Abe *et al.*, Phys. Rev. Lett. **88**, 021801 (2002).
- 134. Observation of Cabibbo-suppressed and W-exchange  $\Lambda_c^+$  baryon decays. Belle Collaboration, K. Abe *et al.*, Phys. Lett. **B524**, 33 (2002).
- 135. Observation of  $B \to J/\psi K_1(1270)$ . Belle Collaboration, K. Abe *et al.*, Phys. Rev. Lett. **87**, 161601 (2001).
- 136. Observation of large CP violation in the neutral B meson system. Belle Collaboration, K. Abe et al., Phys. Rev. Lett. 87, 091802 (2001). [Cited  $\geq$  366]
- 137. Search for direct CP violation in  $B \to K\pi$  decays. Belle Collaboration, K. Abe et al., Phys. Rev. D **64**, 071101(R) (2001).
- 138. Measurement of  $\Gamma(K_{\mu3})/\Gamma(K_{e3})$  ratio using stopped positive kaons. KEK-E246 Collaboration, K. Horie et al., Phys. Lett. **B513**, 311 (2001).
- 139. Observation of Cabibbo suppressed  $B \to D^{(*)}K^-$  decays at Belle. Belle Collaboration, K. Abe et al., Phys. Rev. Lett. 87, 111801 (2001).
- 140. Measurement of branching fractions for  $B \to \pi\pi$ ,  $K\pi$  and KK decays. Belle Collaboration, K. Abe et al., Phys. Rev. Lett. 87, 101801 (2001).
- 141. A measurement of the branching fraction for the inclusive  $B \to X_s \gamma$  decays with Belle. Belle Collaboration, K. Abe et al., Phys. Lett. B **511**, 151 (2001). [Cited  $\geq 245$ ]
- 142. Measurement of inclusive production of neutral pions from  $\Upsilon(4S)$  decays. Belle Collaboration, K. Abe et al., Phys. Rev. D **64**, 072001 (2001).
- 143. Measurement of the CP violation parameter  $\sin 2\phi_1$  in  $B_d^0$  meson decays. Belle Collaboration, A. Abashian et al., Phys. Rev. Lett. **86**, 2509 (2001).
- 144. Measurement of  $B_d^0$ - $\bar{B}_d^0$  mixing rate from the time evolution of dilepton events at the  $\Upsilon(4S)$ . Belle Collaboration, K. Abe, et al., Phys. Rev. Lett. **86**, 3228 (2001).
- 145. Test of exotic scalar and tensor interactions in K<sub>e3</sub> decay using stopped positive kaons. KEK-E246 Collaboration, A. S. Levchenko *et al.*, Phys. Atom. Nuclei, **65**, 2232-2237 (2002).
- 146. Measurement of  $\Gamma(K_{\mu3})/\Gamma(K_{e3})$  ratio using stopped positive kaons. KEK-E246 Collaboration, K. Horie et al., Phys. Lett. **B513**, 311 (2001).
- 147. Test of exotic scalar and tensor couplings in  $K^+ \to \pi^0 e^+ \nu$  decay. KEK-E246 Collaboration, S. Shimizu et al., Phys. Lett. B **495**, 33 (2000).
- 148. A kinematically complete measurement of  $K^+ \to \pi^+ \pi^0 \pi^0$  decays. KEK-E246 Collaboration, Y. H. Shin *et al.*, Eur. Phys. J. **C12**, 627 (2000).
- 149. Test of exotic scalar and tensor couplings in  $K^+ \to \pi^0 e^+ \nu$  decay. KEK-E246 Collaboration, S. Shimizu et al., Phys. Lett. **B495**, 33 (2000).
- 150. Survey of the properties of BGO crystals for the extreme forward calorimeter at BELLE. R. Akhmetshin, et al., Nucl. Instr. and Meth. A455, 324 (2000).
- 151. Beam test of the BELLE extreme forward calorimeter at KEK. M.Z. Wang, H.C. Huang, et al., Nucl. Instr. and Meth. A455, 319 (2000).

152. Search for T-Violating Transverse Muon Polarization in  $K^+ \to \pi^0 \mu^+ \nu$  Decay Using Stopped Kaons.

KEK-E246 Collaboration, M. Abe et al., Phys. Rev. Lett. 83, 4253 (1999). [Cited  $\geq 51$ ]

153. Performance of undoped BGO crystals under extremely high dose conditions. K. C. Peng *et al.*, Nucl. Instr. and Meth. **A427**, 524 (1999).

154. Radiation hardness of undoped BGO crystals. S. K. Sahu *et al.*, Nucl. Instr. and Meth. **A388**, 144 (1997).

155. Measurement of radiation damage on an epoxy based optical glue.
H.C. Huang, K.C. Peng, S.K. Sahu, K. Ueno, Y.H. Chang, C.H. Wang, W.S. Hou, Nucl. Instr. and Meth. A385, 559 (1997).

156. Measurement of radiation damage on an optical reflector.

K. C. Peng et al., Nucl. Instr. and Meth. A384, 544 (1997).

157. Aerogel Cerenkov counter for the BELLE experiment.
T. Iijima et al., Nucl. Instr. and Meth. A379, 457 (1996).

158. Singlet charge 2/3 quark hiding the top: Tevatron and LEP implications. W.S. Hou\* and H.C. Huang, Phys. Rev. D 51, 5285 (1995).

159. Sequence Comparison and Computer Modeling of Cardiotoxins and Cobratoxin Isolated from Taiwan Cobra.

Chiou SH, Hung CC, **Huang HC**, Chen ST, Wang KT, Yang CC, Biochem. Biophys. Res. Commun. **206**, 22 (1995). [Cited  $\geq 34$ ]

160. Inhibition of Protein Kinase C by Snake Venom Toxins: Comparison of Enzyme Inhibition, Lethality and Hemolysis among Different Cardiotoxin Isoforms.

Chiou SH, Chuang MH, Hung CC, Huang HC, Chen ST, Wang KT, Ho CL, Biochem. Mol. Biol. Int. 35, 1103 (1995).

161. Probing the S-1' Subsite Selectivity of an Industrial Alkaline Protease in Anhydrous t-Butanol.

Chen ST, Chen SY, Chen HJ, Huang HC, Wang KT, Bioorg. Med. Chem. Lett. 3, 727-733 (1993).

162. Investigating the s-2 subsite selectivity of alkaline proteases in hydrolysis of diastereo-peptide esters and molecular-modeling interpretation.

Chen ST, Tu CC, Chen SY, Huang HC, Wang KT, Bioorg. Med. Chem. 1, 361-367 (1993).

### Books & Chapters:

163. Systems Biology: Applications in Cancer-related Research.

Juan HF & Huang HC (ed.), World Scientific Publishing, ISBN: 9814324450 (2012).

164. The Applications of Systematic In-Frame, Single-Gene Knockout Mutant Collection of Escherichia coli K-12 (Chapter 12).

Baba, T., **Huang, H.-C.**, Datsenko, K, Wanner, B.L., and Mori H., in *Microbial Gene Essentiality*— *Protocols and Bioinformatics*, ed. Osterman, Andrei L. & Gerdes, Svetlana, Humana Press, pp. 183-194,
ISBN: 978-1-58829-378-7 (2008).

165. Bioinformatics: Microarray Data Clustering and Functional Classification (Chapter 25).

Juan, H.-F. and Huang, H.-C., in *Microarrays (2nd ed.): Volume 2, Applications and Data Analysis*, ed. Rampal, Jang B., Humana Press, pp. 405-416, ISBN: 978-1-58829-944-4 (2007).

### Selected Conference Proceedings:

Peer-reviewed:

166. Prediction of Essential Genes by Mining Gene Ontology Semantics.

Yu-Cheng Liu, Po-I Chiu, **Hsuan-Cheng Huang**, and Vincent S. Tseng, The 7th International Symposium on Bioinformatics Research and Applications (ISBRA2011), Changsha, China, May 27-29, 2011.

167. Comparative Analysis of Co-expressed Protein Interaction Networks Reveals Heart Failure Related Modules.

Chen-Ching Lin, Hsueh-Fen Juan, **Hsuan-Cheng Huang**, The 2nd Taiwan-Japan Young Researchers Conference on Computational and Systems Biology (TJYoung2), Tokyo, Japan, November 4-6, 2008. (Travel Award; Oral presentation)

168. Development of 1-Butanol Tolerant Microorganism for Biofuel Production.

Chang, H.-Y., Huang, H.-C., Huang, T.-C., H. Mori, Juan, H.-F.\*, The Fourth International Meeting on Synthetic Biology (SB4.0), Hong Kong, China, October 10-12, 2008. (Travel Award; Oral presentation)

169. An Efficient Mechanism for Prediction of Protein-Ligand Interactions Based on Analysis of Protein Tertiary Substructures.

Chang, D. T.-H, Chen, C.-Y., Chung, W.-C., Oyang, Y.-J., Juan, H.-F., **Huang, H.-C.**, IEEE Fourth Symposium on Bioinformatics and Bioengineering (BIBE2004), Taichung, Taiwan, ROC, May 19–21 2004.

170. Baryonic B Decays at Belle.

Hsuan-Cheng Huang, Proceedings of the International Europhysics Conference on High Energy Physics (EPS2006), Aachen, Germany, July 17–23, 2003. [Eur. Phys. J. C 33, 587-587; EPJ direct C (2003), DOI: 10.1140/epjcd/s2003-03-110-9]

171. Performance of a Small Angle BGO Calorimeter at Belle.

**H. C. Huang**, Proceedings of the 10th International Conference on Calorimetry in High Energy Physics, Pasadena, USA, March 25–29, 2002.

Invited:

172. Elucidating the essentiality of essential genes.

H.-C. Huang, NCTS Symposium on Network Biology, Hsinchu, Taiwan, Nov. 11, 2005.

173. Identification of RNA-Binding Protein Residues Using Machine Learning Approaches.

H.-C. Huang, Proceedings of the Bioinformatics in Taiwan 2005 Symposium and Workshop (BIT2005), Tainan, Taiwan, Sep. 9-10, 2005.

174. Identification of RNA-Binding Protein Residues Using Machine Learning Approaches.

H.-C. Huang, Proceedings of the 5th Emerging Information Technology Conference (EITC 2005), Taipei, Taiwan, Aug. 15-16, 2005.

175. Systems Biology Study of a Novel Drug on Cancer Cells.

H.-C. Huang, Proceedings of the First K.I.T. Bioinformatics Workshop and Symposium, Iizuka, Fukuoka, Japan, December 9-11, 2004.

176. Proteomics Study of Cyclic RGD in Breast Cancer Cell Using Bioinformatics Techniques.

H.-C. Huang, Proceedings of Proteomics Symposium and 2004 Annual Meetings of Taiwan Bioinformatics Society, Chung-Li, Taiwan, March 5, 2004.

177. Rare B Decays at Belle.

H. C. Huang\* (for the Belle Collaboration), hep-ex/0205062, Proceedings of the XXXVII Rencontres de Moriond on Electroweak Interactions and Unified Theories, Les Arcs, France, March 9-16, 2002.

178. Non-CP Physics Results from Belle.

H. C. Huang\* (for the Belle Collaboration), Proceedings of the 2001 Aspen Winter Conference on Particle Physics, Aspen, Colorado, USA, January 7-13, 2001.

Contributed:

179. Comparison of microRNA-regulated protein interaction networks among worm, fly and human.

Lee, M.-S., Wu, K.-P., Huang, H.-C., 2009 TPS International Proteomics Conference and 5th AOHUPO MPI Workshop, Taipei, Taiwan, June 19 – 20, 2009. (Poster Award)

180. Regulation of carbon dioxide assimilation in R. palustris through CBB gene and GroEL overexpression.

Hu, C.-W., Huang, H.-C., Juan, H.-F.\*, 2008 Taiwan-Japan Proteomics Symposium, Taipei, Taiwan, December 03-05, 2008.(Third Prize Poster Award)

- 181. Screening and proteomics study of butanol-tolerant *E. coli*.

  Chang, H.-Y., Huang, H.-C., Mori, H., Juan, H.-F.\*, Mawudu Autumn School, Taiwan Society of Biochemistry and Molecular Biology, Hsinchu, Taiwan, October 19 20, 2007.(Poster Award)
- 182. Ganoderma lucidum polysaccharides induce apoptosis in uman monocytic leukemia cell line. Hsu, J.-W., Huang, H.-C., Cheng, K.-C., Chen, S.-T., Wong, C.-H., Juan, H.-F.\*, Mawudu Autumn School, Taiwan Society of Biochemistry and Molecular Biology, Hsinchu, Taiwan, October 19 20, 2007.(Poster Award)
- 183. Comparative analysis of differentially expressed genes in normal and white spot syndrome virus infected *Penaeus monodon*.

  Chang, C.-C., Leu, J.-H., , Wu, J.-L., Hsu, C.-W., Hirono, I., Aoki, T., Juan, H.-F., Lo, C.-F., Kou, G.-H.\*, Huang H.-C.\*, Mawudu Autumn School, Taiwan Society of Biochemistry and Molecular Biology, Hsinchu, Taiwan, October 19 20, 2007.(Poster Award)
- 184. Prediction of Functional Associated Proteins Using Topological Similarity in Protein-Protein Interaction Network.

  Chiu, Y.-W., Juan, H.-F., Huang, H.-C.\*, The 8th International Conference on Systems Biology, Long Beach, USA, October 1 6, 2007..
- 185. An Essential Core of Protein-Protein Interaction Network in Escherichia coli. Lin, C.-C., Juan, H.-F., Hsiang, J.-T., Mori, H., Huang, H.-C.\*, The 8th International Conference on Systems Biology, Long Beach, USA, October 1 6, 2007...
- 186. Characterization of microRNA-Regulated Protein-Protein Interaction Network.
  Hsu, C.-W., Juan, H.-F., Huang, H.-C.\*, The 8th International Conference on Systems Biology, Long Beach, USA, October 1 6, 2007...
- 187. Identification of Gene Networks and microRNAs in Atra- and Am80-Treated Human HL-60 Leukemia Cell Differenciation.
  Chen CP, Huang HC, Chen HW, Juan HF\*, (Abstract#P591), The XXII Joint Annual Conference of Biomedical Sciences, Taiwan, Mar. 17-18, 2007. [Poster Award]
- 188. **BSIP** a web server for systems-biology structure identification program development. Ou, C.-H., Chang, C.-C., Hsia, H.-C., Wang, F.-S., Juan, H.-F.\*, Huang, H.-C.\*, The sixth annual Emerging Information Technology Conference (EITC-06), Dallas, USA, Aug. 10-12.. (Oral presentation)
- 189. Bioinformatics Approach to Study the Correlation between Gene Expression Profiles and Protein-Protein Interactions Using Matrices.

  Lin, N., Chiou, S.-H., Juan, H.-F., Huang, H.-C., Fourth Asia Pacific Bioinformatics Conference (APBC2006), Taipei, Taiwan, Feb. 13-16, 2006.
- 190. BSIP a Web Server for Systems-Biology Structure Identification Program Development. Ou, C.-H., Chang, C.-C., Hsia, H.-C., Wang, F.-S., Juan, H.-F.\*, Huang, H.-C.\*, Fourth Asia Pacific Bioinformatics Conference (APBC2006), Taipei, Taiwan, Feb. 13–16, 2006. [2nd Prize]
- 191. Elucidating the essentiality of essential genes in E. coli K-12.

  Bow, Y.-Y., Chang, J.-Y., Juan, H.-F., Mori, H., Huang, H.-C.\*, Fourth Asia Pacific Bioinformatics Conference (APBC2006), Taipei, Taiwan, Feb. 13-16, 2006. [First Prize]
- 192. Topologial Characteristics of Protein Interaction Network and Roles of Essential Genes in E. coli K-12.
  Hwang, Y.-C., Lin, C.-C., Juan, H.-F., Mori, H., Huang, H.-C.\*, Fourth Asia Pacific Bioinformatics Conference (APBC2006), Taipei, Taiwan, Feb. 13-16, 2006.
- 193. **Identification of RNA-binding Protein Residues Using Machine Learning Approaches.** Li, J.-J., Juan H.-F.\*, Chung, I.-F., Huang, H.-C.\*, Fourth Asia Pacific Bioinformatics Conference, , Taipei, Taiwan, Feb. 13-16, 2006.
- 194. Elucidating the essentiality of essential genes in E. coli K-12.

  Bow, Y.-Y., Chang, J.-Y., Juan, H.-F., Mori, H., Huang, H.-C.\*, Sixth International Conference on Systems Biology, Boston, MA, USA, Oct. 19-24, 2005.
- 195. Cyclic RGD-induced cell death in human breast carcinoma cell line MCF-7: the influence of caspase pathway.
  Huang, T.-C., Chang, C.-C., Huang, H.-C., Juan, H.-F.\*, Sixth International Conference on Systems Biology, Boston, MA, USA, Oct. 19-24, 2005.

- 196. High-throughput Proteomic Analysis of the Anti-inflammatory Effect of Berberine in Rat Cultured Vascular Endothelial Cells.
  - Tseng, H.-W., Chen, S.-T., Juan, H.-F., Huang, H.-C., Chen, C.-F., and Wang, G.-J., (Abstract#O100, Oral Presentation) 20th Joint Annual Conference of Biomedical Sciences, Taipei, Taiwan, Mar. 26-27, 2005.
- 197. A Subcellular Proteomics Analysis of Human Myeloid Leukemia Cells Differentiation to Macrophages Using Microwave Technology Combined with Mass Spectrometry. Chang, S.-C., Huang, H.-C., Chen, S.-T., and Juan, H.-F., (Abstract#O87, Oral Presentation), 20th Joint Annual Conference of Biomedical Sciences, Taipei, Taiwan, Mar. 26-27, 2005.
- 198. Cyclic RDG-induced Cell Death in Human Breast Carcinoma (MCF-7) Cells: the Influence of Caspase Pathway.
  Huang, T.-C., Huang, H.-C., Chen, S.-T., and Juan, H.-F.\*, (Abstract#O80, Oral Presentation) 20th Joint Annual Conference of Biomedical Sciences, Taipei, Taiwan, Mar. 26-27, 2005.
- 199. Identification of RNA-binding Protein Residues Using Machine Learning Approaches. Li, J.-J. Juan, H.-F., Ko, R.-S., Chung, I-F., Huang, H.-C.\*, (Abstract#O39, Oral Presentation), 20th Joint Annual Conference of Biomedical Sciences, Taipei, Taiwan, Mar. 26-27, 2005.
- 200. BGSSJ: an Interactive Tool for Biological Interpretation of Gene Expression and Proteomics Data.
  Li, J.-J., Huang, H.-C.\*, Ko, R.-S., Chen, S.-T., Juan, H.-F.\*, (Abstract#258), Bioinformatics in Taiwan, Taipei, Taiwan, September 9-11, 2004. [2nd Prize]
- 201. ProtExt, a Web-based Protein-Protein Interaction Extraction System for PubMed Abstracts.
  Peng, C.-L., Lin, Y.-C., Huang, H.-C., Kao, C. -Y., Chen, S.-T., and Juan, H.-F., 12th International Conference on Intelligent Systems for Molecular Biology and 3rd European Conference on Computational Biology (ISMB/ECCB 2004), Glasgow, UK, Jul. 31 Aug. 4, 2004.
- 202. A New Application of Microwave Technology to Proteomics.

  Juan, H.-F.\*, Chang, S.-C., Huang, H.-C., Chen, S.-T., International Symposium on Microwave Science and Its Application to Related Fields 2004, Takamatsu, Japan, Jul. 26-30, 2004. [Financial Support]
- 203. Proteomic Analysis of a Novel Compound Cyclic RGD in Breast Carcinoma Cell Line MCF-7 Using Biomic Approach.

  Wang, I-H., Huang, H.-C., Chen, S.-T., Juan, H.-F.\*, (Abstract#PB18) 3rd International Proteomics Conference 2004 (IPC03), Taipei, Taiwan, May 15-17, 2004.
- 204. Systems Biology Study of LPS-induced Inflammatory Responses Endothelial Cells. Tseng, H. W., Wang, G. J., Juan, H.-F., Chen, C. F., Huang, H. C., and Chen, S. T., (Abstract#PB14) 3rd International Proteomics Conference 2004 (IPC03), Taipei, Taiwan, May 15-17, 2004.
- 205. BGSSJ: an Interactive Tool for Biological Interpretation of Gene Expression and Proteomics Data.

  Li, J.-J., Huang, H.-C., Ko, R.-S. Chen, S.-T., Juan, H.-F.\*, (Abstract#PA12) 3rd International Proteomics Conference 2004 (IPC03), Taipei, Taiwan, May 15-17, 2004. [Top 10 Prize]
- 206. ProtExt: a Web-based Protein-protein Interaction Extraction System for PubMed Abstract. Peng, C.-L., Lin, Y.-C., Huang, H.-C., Kao, C.-Y., Chen, S.-T., and Juan, H.-F.\*, (Abstract#PA05), 3rd International Proteomics Conference 2004 (IPC03), Taipei, Taiwan, May 15-17, 2004.
- 207. The Molecular Effect of cyclic-RGD peptide on MCF-7 Cells.

  Juan, H.-F., Huang, H.-C., and Chen, S.-T., (Poster #149) The 4th International Conference on Systems Biology, Saint Louis, MO, USA, November 5-9, 2003..
- 208. K<sup>+</sup>K<sup>-</sup> and K<sup>0</sup><sub>S</sub>K<sup>0</sup><sub>S</sub> production in two-photon collisions at Belle.
  H. C. Huang (for the Belle Collaboration), hep-ex/0104024, Proceedings of the 4th International Conference on B Physics and CP Violation (BCP4), Japan, Feb. 2001, pp. 351-354.
- 209. Measurement of  $K_S^0 K_S^0$  production in two-photon collisions with Belle. Belle Collaboration, A. Abashian *et al.*, BELLE-CONF-0018, contributed to *the XXXth International Conference on High Energy Physics*, Osaka, July 2000.

### Technical Reports / Preprints:

- 210. Observation of  $B \to \eta \pi$ . H. C. Huang, Belle Note 608.
- 211. Observation of  $B \to \phi \phi K$ . H. C. Huang, Belle Note 581.
- 212. Evidence of  $B \to \eta h$  Decay. C. C. Chiang, H. C. Huang, et al., Belle Note 506.
- 213. Online Luminosity Measurement of Extreme Forward Calorimeter. P. Chang *et al.*, Belle Note draft.
- 214. Observation of  $B^+ \to p\overline{p}K^+$  Decay and Search for Related Rare Decay Modes. M. Z. Wang, H. C. Huang, K. F. Chen, Belle Note 481.
- 215. Observation of Color-suppressed  $B^0 \to \overline{D}^{(*)0} \eta$  Decay. H. C. Huang, Belle Note 438.
- 216. Study of  $K_S^0 K_S^0$  production in two-photon collisions. H. C. Huang, Belle Note 416.
- 217. The Readout System of EFC. H. C. Huang, et al., Belle Note 377.