CV: Yi Li

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Education

• 1997–2000: National Univ. of Singapore, Singapore

Awarded degree: PhD in Computer Science. (awarded IDA gold medal and prize for being the PhD student with the best thesis in 2001)

Thesis title: "From support vector machines to large margin classifiers" (Supervisor: Prof. Phil Long)

• 1996–1997: Royal Holloway College, Univ. of London, U.K.

PhD Candidate in Computer Science

• 1990–1993: Xi'an Jiaotong Univ., P R China. Computer Science.

Awarded Degree: M. Eng. (Supervisor: Prof. Hongbao Shi)

• 1986–1990; Xi'an Jiaotong Univ., P R China. Computer Science.

Awarded Degree: B. Sci. (top 5%) (admitted to the university without taking the national university entrance examinations)

Research Experience

- Apr 2002 Dec 2006: Postdoc at Information & Mathematical Sciences, Genome Institute of Singapore, Singapore.
 - Developed unsupervised class discovery method for microarray gene expression data (publication 11)
 - o Developed a method to select tag SNPs (publication 12)
- Jan 2001 Apr 2002: Research assistant at Dept. of Engineering Mathematics, Univ. of Bristol. U.K.
 - o Relevance vector machine for supervised microarray gene

expression data analysis (publication 10)

Work Experience

- 2007 present: staff scientist at Human Genetics, Genome Institute of Singapore, Singapore.
 - Collaborated with Karolinska Institute and developed a leave-one-out based pipeline for SNP coverage evaluation (publications 18-21, 23)
 - Developed regularized regression analysis of haplotypes of SNPs in variable-sized sliding windows (publication 14)
 - Applications of developed haplotype analysis method (publications 22, 29)
 - o Developed pipelines for pathway analysis (publication 27)
 - Developed pipelines for genome-wide and exome-wide association analysis, meta analysis (publications 17, 25, 28, 31-33, 40, 42-43, 46-47)
 - Explored causal variant detection using exome sequencing and linkage analysis in families of Mendelian disease (publication 39,41)
 - Explored HLA allele typing and imputation and its application in anti-drug response detection (publication 34-35, 45)
 - Heritability estimation software evaluation
 - Explored RNA-Seq for gene expression and developing pipelines for integrated analysis (publication 16 and in progress)
 - Making use of PacBio sequencing technology to estimate copy numbers of highly similar long repeats (in progress)
 - Gained disease knowledge from participating in different disease projects, for example, immune-related diseases (leprosy, psoriasis, ankylosing spondylitis) and cancer (nasopharyngeal carcinoma, breast cancer), etc.
 - o Co-guided students from collaborators in China
 - Zheng Xuqi (PhD students) from Department of Rheumatology and Immunology, the Third Affiliated

Hospital of Sun Yat-sen University, GuangZhou, China, on various genetic analysis for ankylosing spondylitis disease project (Jan 2014- Dec 2015)

- Wang Zhenzhen (post graduate) from Shandong Provincial Institute of Dermatology and Venereology, Shandong Academy of Medical Sciences, Jinan, Shandong, China on dataset processing, imputation, statistical analysis and leprosy exome-array genotype calling, leprosy exome-wide association analysis (Aug 2013 – Jan 2015)
- Ai Zhen (PhD student) from Department of Nephrology, the First Affiliated Hospital, Sun Yat-sen University, GuangZhou, China on using PacBio sequencing to estimate haplotype copy numbers of highly similar long repeats (Apr 2014 – Mar 2016)
- Yang Cao (PhD students) from Institute of Dermatology and Department of Dermatology at No.1 Hospital, Anhui Medical University, Hefei, Anhui, China on various genetic analysis for psoriasis disease (Feb 2015-Apr 2016)

Projects co-guided

- dyschromatosis universalis hereditaria disease project, from discovery analysis to functional validation experiment design. Was the main person to reply reviewers' comments. Published a paper in PLoS ONE in 2014
- Dowling-Degos disease project, coordinated with Chinese side and did various analysis, was the main person to reply reviewers' comments. Published a paper in PLoS ONE in 2014

Project in charge of

- Organized and divided the task for analyzing GAW18 genetic data and published a paper in BMC Proceedings in 2014
- 1995-1996: assistant professor at Dept. of Compute Science, Xi'an Jiaotong Univ., Xi'an, P R China.
- 1993-1995: teaching assistant at Dept. of Compute Science, Xi'an Jiaotong Univ., Xi'an, P R China.

Skills:

- R/Stata
- Perl

IPA

- Matlab
- Unix/Linux shell scripts
- GeneMania

- C/C++
- MySQL

• GATK

Part of the attended short courses in biostatistics, epidemiology and drug discovery:

- 2-week course on "Basic Epidemiology" from NUS-KI Joint PhD program in Genetics and Molecular Epidemiology, 26 Sept -7 Oct 2005. Lecturer: Joseph Abraham and Rulla Tamimi, ScD.
- 1-week course on "Advanced Biostatistics" from NUS-KI Joint PhD program in Genetics and Molecular Epidemiology, 6-10 Mar. 2006. Lecturer: Rino Bellocco, Dept. of Medical Epidemiology and Biostatistics, Karolinska Institute.
- 3-day short course in "Causal inference from longitudinal data" by associate Prof. Miguel A Hernan, Dept. of Epidemiology, Harvard School of Public Health, 27-29 Nov. 2006, at department of Community, Occupational and Family Medicine, Yong Loo Lin School of Medicine, MD3, National University of Singapore.
- 4-day short course on "Advanced epidemiology" by Prof Dimitrios Trichopoulos, Harvard School of Public Health, 14 17 May 2007, at Department of Community, Occupational and Family Medicine, Yong Loo Lin School of Medicine, MD3, National University of Singapore.
- 4-day short course on "Drug Discovery" provided by ETC A-Star, Mondays, 7, 14, 21, 28 September 2015, Biopolis, Creation Theatre, Matrix Level 4.

Workshops which I conducted

• Statistical Genetics workshop: 27-28 Jan 2016 at Khoo Teck Puat Hospital, Singapore

Honors and Awards

- 1996-1997: fellowship from Marconi Inc. U.K.
- 1997-2000: scholarship, NUS, Singapore
- May 2000: Dean's Graduate Award for meritorious performance in the semester 2, 1999/2000, NUS
- 2001: IDA gold medal and prize for being the PhD student with the best thesis, NUS

- 2008-2011: Individual Research grant, NMRC, Singapore (S\$800,000), "Genetics of Atopy and Allergic Airway Disease in Singapore", co-investigator
- 2011-2014: TCR grant, BMRC, Singapore (S\$976,000), "Development of a diagnostic and prognostic model for primary open angle glaucoma (POAG) using genomic and endophenotypic constructs", collaborator.

Peer Reviewer

- International Journal of Information Technology (2004), Singapore
- The Journal of Machine Learning Research (2007), USA
- Journal of Computer and System Sciences, special issue on learning theory, USA (2007)
- PLoS ONE (2008), USA
- BMC Genetics (2013-2015), USA

Selected publication list (IP stands for *impact factor*):

Machine learning and methodology development related publications:

- 1. **Li, Y**, Shi, H. B. "A method of knowledge acquisition based on improved BP algorithm". 3rd International Conference on Automation, Robotics & Computer Vision, P580-584, 1994.
- 2. **Li, Y**, Shi, H. B. "The N-R method of acquiring multi-step reasoning production rules based on NN". IEEE International Conference on Neural Networks, P1150-1155, Volume 2, 1996.
- 3. Li, Yi and Shi, Hongbao, "The N-R method of acquiring knowledge automatically and interactively based on Neural Network" (in Chinese). *Journal of Software*, 7(7):435-441, 1996
- 4. Li, Y. and Long, P. "The Relaxed Online Maximum Margin Algorithm", in the Proceedings of the thirteenth annual conference on Neural Information Processing Systems (NIPS), 1999.
- 5. Li, Y. and Long, P. and Srinivasan, A. "Improved Bounds on the Sample Complexity of Learning", in the Proceedings of the 11th ACM-SIAM Symposium on Discrete Algorithms (SODA), 2000.
- 6. Li, Y. "Selective Voting for Perceptron-like Online Learning". In the Proceedings of the 17th International Conference on Machine Learning

- (ICML), pp559-566, 2000.
- 7. Li, Y. and Long, P. and Srinivasan, A. "The One-Inclusion Graph Algorithm is Near-Optimal for the Prediction Model of Learning". *IEEE Transactions on Information Theory*, Vol. 47, No. 3, pp1257–1261, 2001.
- 8. Li, Y. and Long, P. and Srinivasan, A. "Improved Bounds on the Sample Complexity of Learning". *Journal of Computer and System Sciences*, Vol. 62, No. 3, pp516-527, 2001.
- 9. Li, Y. and Long, P. "The Relaxed Online Maximum Margin Algorithm", *Machine Learning*, special issue on support vector machines and kernel methods, Vol. 46, No. 3, pp361-388, 2002.
- 10. Li, Y. and Campbell, C. and Tipping, M. "Bayesian automatic relevance determination algorithms for classifying gene expression data", *Bioinformatics* (IP: 5.766), vol 18, No 10, pp1332-1339, 2002.
- 11. Li, Y. and Sung, W-K. and Miller, L.D. "Multimodality as a criterion for feature selection in unsupervised analysis of gene expression data", *Fifth IEEE symposium on Bioinformatics and Bioengineering* (BIBE05), 19-21, Oct., 2005, Minneapolis, Minnesota, USA.
- 12. Liu*, T.F. and Sung*, W-K and Liu*, Y. and Liu, Jian-jun and Mittal, Ankush and Mao, Pei-Lin. "Effective algorithms for Tag SNP selection", *Journal of Bioinformatics and Computational Biology*, 3:1089-1106, 2005 (*: equally contributed).
- 13. Y. Li and P. Long "Learnability and the doubling dimension", *Advances in Neural Information Processing Systems*, 889-896, 2006.
- 14. Li, Y. and Sung, W.K. and Liu, J.J. "Association mapping via regularized regression analysis of single-nucleotide-polymorphism haplotypes in variable-sized sliding windows", *The American Journal of Human Genetics* (IP: 10.603), 80:705-715, 2007.
- 15. Nader H. Bshouty, Yi Li, Philip M. Long. "Using the doubling dimension to analyze the generalization of learning algorithms". *Journal of Computer & System Sciences*, 75(6): 323-335, 2009.
- 16. Yi Li[§], Jia Nee Foo, Herty Liany, Hui Qi Low, Jianjun Liu[§] (§: corresponding author) "Combined Linkage and Family-based Association Analysis Improves Candidate Gene Detection in GAW18 Simulation Data". *BMC Proceedings* 2014, 8(Suppl 1):S29.
- 17. Jin Zhou, Erwin Tantoso, Lai-Ping Wong, Rick Twee-Hee Ong, Jin-Xin Bei, Yi Li, Jianjun Liu, Chiea-Chuen Khor, and Yik-Ying Teo "iCall: An improved genotype-calling algorithm for rare and common variants on

the Illumina exome array". Bioinformatics (IP:5.323) 2014, 30:1714-20.

Human Genetics related publications:

- 18. Skipper, L. and Li, Y. and Bonnard, C. and Pavanni, R. and Yih, Y. and Chua, E. and Sung, W.K. and Tan, L. and Wong, M.C. and Tan, E.K. and Liu, J.J. "Comprehensive evaluation of common genetic variation within LRRK2 reveals evidence for association with sporadic Parkinson's disease", *Human Molecular Genetics* (IP: 7.692), 14:3549-3556, 2005.
- 19. Kristjana Einarsdóttir, Lena U. Rosenberg, Keith Humphreys, Carine Bonnard, Juni Palmgren, Yuqing Li, Yi Li, Kee Seng Chia, Edison T. Liu, Per Hall, Jianjun Liu and Sara Wedrén. "Comprehensive analysis of the ATM, CHEK2 and ERBB2 genes in relation to breast tumour characteristics and survival: a population-based case-control and follow-up study", *Breast Cancer research* (IP:5.87), 8:R67, 2006.
- 20. Kristjana Einarsdóttir, Keith Humphreys, Carine Bonnard, Yuqing Li, Yi Li, Kee Seng Chia, Edison T. Liu, Per Hall, Jianjun Liu and Sara Wedrén. "Effect of ATM, CHEK2 and ERBB2 tagSNPs and Haplotypes on Endometrial Cancer Risk", Human Molecular Genetics (IP: 7.692), 16(2):154-164, 2006.
- 21. Kristjana Einarsdóttir, Hatef Darabi, Yi Li, Yen Ling Low, Yu Qing Li, Carine Bonnard, Arvid Sjölander, Kamila Czene, Sara Wedrén, Edison T Liu, Per Hall, Keith Humphreys and Jianjun Liu. "ESR1 and EGF genetic variation in relation to breast cancer risk and survival", Breast Cancer Research (IP:5.87), 10 (1), 2008.
- 22. Burgner D, Davila S, Breunis WB, Ng SB, Li, Y, Bonnard C, Ling L, Wright VJ, Odam M, Shimizu C, Burns JC, Levin M, Kuijpers TW, Hibberd ML on behalf of the International Kawasaki Disease Genetics Consortium. "A genome-wide association study identifies novel susceptibility loci for Kawasaki disease". *PLoS Genet* (IP: 8.517), 5(1):e1000319, 2009.
- 23. Kristjana Einarsdóttir, Hatef Darabi, Kamila Czene, Yi Li, Yen Ling Low, Yu Qing Li, Carine Bonnard, Sara Wedrén, Edison T. Liu, Per Hall, Jianjun Liu, Keith Humphreys. "Common Genetic Variability in ESR1 and EGF in Relation to Endometrial Cancer Risk and Survival". *British Journal of Cancer* (IP: 5.082), 100(8):1358-64, 2009.
- 24. S.C. Lim, J. J. Liu, H. Q. Low, N. G. Morgenthaler, Y. Li, L. Y. Yeoh, Y. S. Wu, S.K. Goh, C. Y. Chionh, S. H. Tan, Y. C. Kon, P. C. Soon, Y. M. Bee, T.

- Subramaniam, C. F. Sum, K. S. Chia. "Microarray analysis of multiple candidate genes and associated plasma proteins for nephropathy secondary to type 2 diabetes among Chinese". *Diabetologia* (IP: 6.487) 52:1343-51 2009.
- 25. Fu-Ren Zhang, Wei Huang, Shu-Min Chen, Liang-Dan Sun, Hong Liu, , Yi Li, Yong Cui, et al "Genome-wide Association Study of Leprosy in Chinese Population". *New England Journal of Medicine* (IP: 51.658), 361:2609-2618, 2009.
- 26. Jian-Wen Han, Hou-Feng Zheng, Yong Cui, Liang-Dan Sun, Dong-Qing Ye, Zhi Hu, Jin-Hua Xu, Zhi-Ming Cai, Wei Huang, Guo-Ping Zhao, Hong-Fu Xie, Hong Fang, Qian-Jin Lu, Jian-Hua Xu, Xiang-Pei Li, Yun-Feng Pan, Dan-Oi Deng, Fan-Oin Zeng, Zhi-Zhong Ye, Xiao-Yan Zhang, Qing-Wen Wang, Fei Hao, Li Ma, Xian-Bo Zuo, Fu-Sheng Zhou, Wen-Hui Du, Yi-Lin Cheng, Jian-Qiang Yang, Song-Ke Shen, Jian Li, Yu-Jun Sheng, Xiao-Xia Zuo, Wei-Fang Zhu, Fei Gao, Pei-Lian Zhang, Qing Guo, Bo Li, Min Gao, Feng-Li Xiao, Cheng Quan, Chi Zhang, Zheng Zhang, Kun-Ju Zhu, Yang Li, Da-Yan Hu, Wen-Sheng Lu, Jian-Lin Huang, Sheng-Xiu Liu, Hui Li, Yun-Qing Ren, Zai-Xing Wang, Chun-Jun Yang, Pei-Guang Wang, Wen-Ming Zhou, Yong-Mei Lv, An-Ping Zhang, Sheng-Quan Zhang, Da Lin, Yi Li, Hui Qi Low, Min Shen, Zhi-Fang Zhai, Ying Wang, Feng-Yu Zhang, Sen Yang, Jian-Jun Liu & Xue-Jun Zhang. "Genome-wide association study in a Chinese Han population identifies nine new susceptibility loci for systemic lupus erythematosus". Nat. Genet. (IP: 35.532), 41:1234-1237, 2009.
- 27. Yen Ling Low, Yuqing Li, Keith Humphreys, Anbupalam Thalamuthu, Yi Li, Hatef Darabi, Sara Wedrén, Carine Bonnard, Kamila Czene, Mark Iles, Tuomas Heikkinen, Kristiina Aittomäki, Carl Blomqvist, Heli Nevanlinna, Per Hall, Edison T Liu and Jianjun Liu. "Multi-variant Pathway Association Analysis Reveals the Importance of Genetic Determinants of Estrogen Metabolism in Breast and Endometrial Cancer Susceptibility", PLoS Genetics (IP: 8.517) 6(7): e1001012, 2010.
- 28. Jin-Xin Bei*, Yi Li*, Wei-Hua Jia, Bing-Jian Feng, Gangqiao Zhou, Li-Zhen Chen, Qi-Sheng Feng, Hui-Qi Low, Hongxing Zhang, Fuchu He, E Shyong Tai, Tiebang Kang, Edison T Liu, Jianjun Liu & Yi-Xin Zeng (*:contributed equally) "A genome-wide association study of nasopharyngeal carcinoma identifies three new susceptibility loci", Nat. Genet. (IP: 35.532), 42:599-603, 2010
- 29. Yuqing Li, **Yi Li**, Sara Wedrén, Guoliang Li, Tze Howe Charn, Desai Kartiki Vasant, Carine Bonnard, Kamila Czene, Keith Humphreys, Hatef

- Darabi, Kristjana Einarsdóttir, Tuomas Heikkinen, Kristiina Aittomäki, Carl Blomqvist, Kee Seng Chia, Heli Nevanlinna, Per Hall, Edison T Liu, Jianjun Liu. "Genetic variation of ESR1 and its co-activator PPARGC1B is synergistic in augmenting the risk of estrogen receptor positive breast cancer", *Breast Cancer Research* (IP: 5.87), 13:R10, 2011.
- 30. Anand Kumar Andiappan, De Yun Wang, Ramani Anantharaman, Pallavi Nilkanth Parate, Bani Kaur Suri, Hui Qi Low, Yi Li, Wanting Zhao, Paola Castagnoli, Jianjun Liu, Fook Tim Chew. "Genome-wide association study for atopy and allergic rhinitis in a Singapore Chinese population". *PLoS ONE* (IP: 3.73) 6(5): e19719, 2011.
- 31. Furen Zhang, Hong Liu, Shumin Chen, Huiqi Low, Liangdan Sun, Yong Cui, Tongsheng Chu, Yi Li, Xi'an Fu, Yongxiang Yu, Gongqi Yu, et al "Identification of two new loci at *IL23R* and *RAB32* that influence susceptibility to leprosy". *Nat. Genet.* (IP: 35.532), 43:1247-1253, 2011
- 32. Xue-Qing Yu, Ming Li, Hong Zhang, Hui-Qi Low, Xin Wei, Jin-Quan Wang, Liang-Dan Sun, Kar-Seng Sim, Yi Li, Jia-Nee Foo, Wei Wang, Zhi-Jian Li, Xian-Yong Yin, Xue-Qing Tang, Li Fan, Jian Chen, Rong-Shan Li, Jian-Xin Wan, Zhang-Suo Liu, Tan-Qi Lou, Li Zhu, Xiao-Jun Huang, Xue-Jun Zhang, Zhi-Hong Liu & Jian-Jun Liu. "A genome-wide association study in Han Chinese identifies multiple susceptibility loci for IgA nephropathy". *Nat. Genet.* (IP: 35.532), 44:178–182, 2012.
- 33. Hong Liu, Astrid Irwanto, Hongqing Tian, Xi'an Fu, Yongxiang Yu, Gongqi Yu, Huiqi Low, Tongsheng Chu, Yi Li, Benqing Shi, Mingfei Chen, Yonghu Sun, Chunying Yuan, Nan Lu, Jiabao You, Fangfang Bao, Jinghui Li, Jian Liu, Huaxu Liu, Dianchang Liu, Xiulu Yu, Lin Zhang, Qing Yang, Na Wang, Guiye Niu, Shanshan Ma, Yan Zhou, Chuan Wang, Shumin Chen, Xuejun Zhang, Jianjun Liu and Furen Zhang. "Identification of *IL18RAP/IL18R1* and *IL12B* as Leprosy Risk Genes Demonstrates Shared Pathogenesis between Inflammation and Infectious Diseases". Am J Hum Genet (IP:10.603), 91: 935-941, 2012.
- 34. Zhang Fu-Ren, Liu Hong, Astrid Irwanto, Fu Xi-An, Yi Li, Yu Gong-Qi, Yu Yong-Xiang, Chen Ming-Fei, et al "HLA-B*13:01 and Dapsone-Induced Hypersensitivity Syndrome Identification of HLA-B*1301 as a Risk Predictor for Dapsone-induced Hypersensitivity Syndrome", N Engl J Med (IP: 51.658), 369:1620:1628, 2013.

- 35. Jia Nee Foo, Karin E. Smedby, Kipp Akers, Mattias Berglund, Ishak D. Irwan, Xiaoming Jia, Yi Li, Lucia Conde, Hatef Darabi, Paige M. Bracci, Mads Melbye, Hans-Olov Adami, Bengt Glimelius, Chiea Chuen Khor, Henrik Hjalgrim, Leonid Padyukov, Keith Humphreys, Gunilla Enblad, Christine F. Skibola, Paul I.W. de Bakker, Jianjun Liu "Coding Variants at the Hexa-allelic Amino Acid 13 of the *HLA-DRB1* Gene Explain Independent SNP Associations with Follicular Lymphoma Risk". *Am J Hum Genet* (IP:10.603), 93:167-172, 2013.
- 36. Hong Liu, Fangfang Bao, Astrid Irwanto, Xi'an Fu, Nan Lu, Gongqi Yu, Yongxiang Yu, Yonghu Sun, Huiqi Low, Yi Li, Herty Liany, Chunying Yuan, Jinghui Li, Jian Liu, Mingfei Chen, Huaxu Liu, Na Wang, Jiabao You, Shanshan Ma, Guiye Niu, Yan Zhou, Tongsheng Chu, Hongqing Tian, Shumin Chen, Xuejun zhang, Jianjun Liu, Furen Zhang "An association study of TOLL and CARD with leprosy susceptibility in Chinese population". *Hum Mol Genet* (IP:7.692), 22:4430-7, 2013.
- 37. Jingmei Li, Jia Nee Foo, Nils Schoof, Jajini S. Varghese, Pablo Fernandez-Navarro, Gretchen L. Gierach, Swee Tian Quek, Mikael Hartman, Silje Nord, Vessela N. Kristensen, Marina Pollán, Jonine D. Figueroa, Deborah J. Thompson, Yi Li, Chiea Chuen Khor, Keith Humphreys, Jianjun Liu, Kamila Czene, Per Hal "Large-scale genotyping identifies a new locus at 22q13.2 associated with female breast size". *J Med Genet* (IP:5.703), 50:666-73, 2013.
- 38. Jingmei Li, Kamila Czene, Hiltrud Brauch, Werner Schroth, Pilar Saladores, Yi Li, Keith Humphreys, Per Hall "Association of CYP2D6 metabolizer status with mammographic density change in response to tamoxifen treatment". Accepted by Breast Cancer Research 2013 (Impact factor: 5.87).
- 39. Liu Hong*, Yi Li*, Kwok Hon Hung Ken*, Wang Na, Wang Chuan, Chen Xuechao, Sheng Donglai, Fu Xi'an, See Zhen Wei Kelvin, Foo Jia Nee, Low Hui Qi, Herty Liany, Ishak Darryl Irwan, Liu Jian, Yang Baoqi, Chen Mingfei, Yu Yongxiang, Yu Gongqi, Niu Guiye, et al (*:contributed equally) "Genome-wide linkage, exome sequencing and functional analyses identify *ABCB6* as the pathogenic gene of dyschromatosis universalis hereditaria". *PLoS ONE 2014* (IP: 3.73).
- 40. Ching Yu Cheng, Kenji Yamashiro, Li Jia Chen, Jeeyun Ahn, Lulin Huang, Lvzhen Huang, Chui Ming G. Cheung, Peter D. Cackett, Ian Y. Yeo, Choi Mun Chan, Junxiong Pang, Kar Seng Sim, Adrian H. Koh, Peng Chen, Shu

Yen Lee, Boon Kwang Loh, Ranjana Mathur, Edmund Wong, Doric Wong, Augustinus Laude, Yaoyao Sun, Sonia Davila, Isao Nakata, Masahiro Miyake, Hideo Nakanishi, Yumiko Akagi-Kurashige, Norimoto Gotoh, Akitaka Tsujikawa, Fumihiko Matsuda, the Nagahama Cohort Research Group, Keisuke Mori, Shin Yoneya, Yoichi Sakurada, Hiroyuki Iijima, Tomohiro Iida, Shigeru Honda, Timothy Yuk Yau Lai, Pancy, Oi Sin Tam, Haoyu Chen, Shibo Tang, Xiaoyan Ding, Feng Wen, Fang Lu, Xiongze Zhang, Yi Shi, Peiquan Zhao, Bowen Zhao, Jinhong Sang, Bo Gong, Yin Lin, Martin L. Hibberd, Jia Nee Foo, Ningli Wang, Chang Hua Wong, Yufen Goh, Kai Yee Toh, Wee Yang Meah, Su Qin Peh, Mayuri Bhargava, Lingam Gopal, Thet Niang, Merwyn Chew, Eranga N Vithana, Tin Aung, YingFeng Zheng, Jiemin Liao, Wan Ting Tay, Jie Jin Wang, Paul Mitchell, Peng Zhou, Fengxue Xie, Jinlong Liang, Junpu Mei, Xin Jin, Mineo Ozaki, Takinori Mizoguchi, Se Joon Woo, Hum Chung, Hyeong-Gon Yu, Joo Young Shin, Dong Ho Park, In Taek Kim, Woohyok Chang, Min Sagong, Sang-Joon Lee, Hyun Woong Kim, Ji Eun Lee, Yi Li, Jianjun Liu, Yik Ying Teo, Tock Han Lim, Suk-Kyun Yang, Kyuyoung Song, E Shyong Tai, Jin Xin Bei, Yi Xin Zeng, Xiao Xin Li, Zhenglin Yang, Kyu-Hyung Park, Chi Pui Pang, Nagahisa Yoshimura, Tien Yin Wong, & Chiea Chuen Khor "New loci and coding variants confer risk for age-related macular degeneration in East Asians". Nat Comm 2014.

- 41. Mingfei Chen#, Yi Li#, Hong Liu, Xi'an Fu, Yiongxiang Yu, Gongqi Yu, Chuan Wang, Fangfang Bao, Herty Liany, Zhenzhen Wang, Zhongxiang Shi, Dizhan Zhang, Guizhi Zhou, Jianjun Liu, Furen Zhang (# co-first author). "Analysis of POFUT1 gene mutation in a Chinese family with Dowling-Degos disease". *PLoS ONE* (IP: 3.73) 2014.
- 42. Xianyong Yin , Hui Qi Low , Ling Wang , Yonghong Li , Eva Ellinghaus , Jiali Han , Xavier Estivill , Liang-dan Sun , Xianbo Zuo , Changbing Shen , Caihong Zhu , Anping Zhang , Fabio Sanchez , Leonid Padyukov, Joseph J Catanese , Gerald Krueger , Kristina P Callis-Duffin , Mr. Sören Mucha , Michael Weichenthal , Prof. Stephan Weidinger , Wolfgang Lieb , Jia Nee Foo , Yi Li , Kar Seng Sim , Herty Liany , Ishak Darryl Irwan , Prof. Yik-Ying Teo , Colin TS Theng , Rashmi Gupta , Anne Bowcock , Philip L. De Jager , Abara Qureshi , Paul I.W. de Bakker , Mark Seielstad , Wilson Liao ,Mona Ståhle , Andre Franke , Xue-jun Zhang, Jianjun Liu "Genome-wide meta-analysis identifies multiple novel associations and ethnic heterogeneity of psoriasis susceptibility". Nat Comm 2015, 6:6916.
- 43. Hong Liu, Astrid Irwanto, Xi'an Fu, Gongqi Yu, Yongxiang Yu, Yonghu Sun, Chuan Wang, Zhenzhen Wang, Yukinori Okada, Hui Qi Low, **Yi Li**, Herty Liany, Mingfei Chen, Fangfang Bao, Jinghui Li, Jiabao You, et al "Discovery of six new susceptibility loci and analysis of pleiotropic effects"

- in leprosy". Nat Genet, 47:267-271, 2015.
- 44. Byong Duk Ye, Hyunchul Choi, Myunghee Hong, Woo Jin Yun, Hui-Qi Low, Talin Haritunians, Kyung-Jo Kim, Sang Hyoung Park, Inchul Lee, So-Young Bang, Tae-Hwan Kim, Hyoung Doo Shin, Daehee Kang, Hee-Shang Youn, Yi Li, Jianjun Liu, Dermot P B McGovern, Suk-Kyun Yang and Kyuyoung Song "Identification of Ten Additional Susceptibility Loci for Ulcerative Colitis through Immunochip Analysis in Koreans". Inflammatory Bowel Disease 2016.
- 45. Hong Liu, Yonghu Sun, Baoqi Yang, Chuan Wang, FOO Jia Nee, Mingfei Chen, Fangfang Bao, Qilin Zhang, Astrid Irwanto, Bei Jinxin, Yi Li, Gongqi Yu, Yongxiang Yu, Xi'an Fu, Zhenzhen Wang, Jiabao You, Jinghui Li, Jian Liu, Na Wang, Guiye Niu, Benqing Shi, Dizhan Zhang, Meiling Yu, Zhongxiang Shi, Shengli Chen, Xianmei Lu, Hongqing Tian, Guizhi Zhou, Yuki Hitomi, Paul I.W. de Bakker, Jianjun Liu & Furen Zhang "Genome-wide association study and comprehensive HLA analysis in Pemphigus". Submitted.
- 46. Hong Liu*, Zhen-zhen Wang*, Yi Li*, Gong-qi Yu, Xi-an Fu, Chuan Wang, et al "Genome-wide Analysis of Protein-Coding Variants in Leprosy" (*: contributed equally). *Under review of JID*.
- 47. Zhenzhen Wang, Yonghu Sun, Xi'an Fu, Gongqi Yu, et al. "A Large-scale Genome-wide Association and Meta-analysis Identified Four Novel Susceptibility Loci for leprosy", accepted by *Nat Comm*.