

• **Name:**

Qiang Pan-Hammarström

• **Current Position:**

Professor in Clinical Immunology, Karolinska Institutet (KI), Sweden; Guest Professor, Tianjin Medical University Cancer Institute, China; Guest Professor, Sun Yat-Sen University Cancer Center, China

• **Country:**

Sweden

• **Educational Background:**

MD, 1993, Sun Yat-Sen University

PhD, 1999, Karolinska Institutet

• **Professional Experience:**

1993 – 1994 Physician in Guangzhou Respiratory Disease Research Institute, China  
2000 Postdoctoral fellow in the Division of Gastroenterology, Harvard Medical School, USA  
2001 – 2003 Postdoctoral fellow at the Center for Oral Biology, KI, Sweden  
2004 – 2011 Associate Professor, Department of Laboratory Medicine, KI, Sweden  
2005 – 2009 Guest Professor, School of Basic Medical Sciences, Peking University, China  
2012 Visiting Scientist, Division of Immunology, Harvard Medical School, USA  
2013 – 2015 Visiting Professor, Rockefeller University, USA (short sabbatical visits)  
2016 – 2017 Visiting Scientist, Broad Institute at MIT and Harvard, USA (short sabbatical visits)  
2011 – 2018 Professor in Clinical Immunology, Department of Laboratory Medicine, KI, Sweden  
2018- now, Professor in Clinical Immunology, Department of Biosciences and Nutrition, KI, Sweden

• **Professional Organizations:**

- European Society for primary immunodeficiency (ESID) (1997-)
- Swedish Medical Society (1999-)
- American Society for Immunology (AAI) (2000-)
- Elected member for the Henry Kunkel Society (2016-)
- American Association for Cancer Research (AACR) (2018-)
- Elected member for the Nobel Assembly at the Karolinska Institutet (2019-)

• **Main Scientific Publications:**

Altogether published 116 papers in areas of immunoglobulin gene diversifications, primary immunodeficiencies, genome instability and B cell malignancies; 22 as first author and 31 as senior or co-senior author. The total impact of the papers published to date is 932 with an average impact 8.2.

Total citations: 6488; H index: 45 (Google Scholar). Complete list of published work:

[https://www.ncbi.nlm.nih.gov/pubmed/?term=pan-hammarstrom+or+\(Pan+q+and+Hammarstrom+l\)](https://www.ncbi.nlm.nih.gov/pubmed/?term=pan-hammarstrom+or+(Pan+q+and+Hammarstrom+l)).

## Twenty selected publications

- 1 **Q. Pan**, N. Matamoros, J. Björkander, M. E. Conley, L. Hammarström. 2002. Lack of IgA in C $\square$ -deficient patients. *Nat Immunol.* 3:595.
- 2 C. Weiner, Y. Hu, **Q. Pan**, H. Marcotte, A. Hultberg, D. Delwar, P. J. Van Dalen, P. H. Pouwels, R. J. Leer, C. G. Kelly, C. van Dollenweerd, J. K. Ma, L. Hammarström. 2002. *In situ* delivery of passive immunity by lactobacilli producing single-chain antibodies. *Nat Biotech.* 20:702-706.
- 3 U. Salzer, H. M. Chapel, A. D. B. Webster, **Q. Pan-Hammarström**, A. Schmitt-Graeff, M. Schlesier, H. H. Peter, J. K. Rockstroh, P. Schneider, A. A. Schäffer, L. Hammarström, B. Grimbacher. 2005. Mutations in *TNFRSF13B* encoding TACI are associated with common variable immunodeficiency in humans. *Nat Genet.* 37:820-828.
- 4 **Q. Pan-Hammarström**, A. M. Jones, A. Lähdesmäki, W. Zhou, R. A. Gatti, L. Hammarström, A. Gennery, M. R. Ehrenstein. 2005. Impact of DNA ligase IV on nonhomologous end joining pathways during class switch recombination in human cell. *J Exp Med.* 201:189-194.
- 5 **Q. Pan-Hammarström**, A. Lähdesmäki, Y. Zhao, L. Du, Z. Zhao, S. Wen, V. L. Ruiz-Perez, D. K. Dunn-Walters J. A. Goodship, L. Hammarström. 2006. Disparate roles of ATR and ATM in immunoglobulin class switch recombination and somatic hypermutation. *J Exp Med.* 203:99-110.
- 6 **Q. Pan-Hammarström**, U. Salzer, L. Du, J. Björkander, C. Cunningham-Rundles, D. L. Nelson, C. Bacchelli, H. B. Gaspar, S. Offer, T. W. Behrens, B. Grimbacher, L. Hammarström. 2007. Reexamining the role of TACI coding variants in common variable immunodeficiency and selective IgA deficiency. *Nat Genet.* 39:429-430.
- 7 L. Du, M. van der Burg, S. Popov, A. Kotnis, J. J. M. van Dongen, A. R. Gennery, **Q. Pan-Hammarström**. 2008. Artemis-dependent end joining pathway during immunoglobulin class switch recombination. *J Exp Med.* 205:3031-40.
- 8 R. C. Ferreira, **Q. Pan-Hammarström**, R. R. Graham, V. Gateva, G. Fontan, A. T. Lee, W. Ortmann, E. Urcelay, M. Fernandez-Arquero, C. Nunez, G. Jorgensen, B. R. Ludviksson, S. Koskinen, K. Haimila, H. F. Clark, L. Klareskog, P. K. Gregersen, T. W. Behrens, L. Hammarström. 2010. Association of IFIH1 and other autoimmunity risk alleles with selective IgA deficiency. *Nat Genet.* 42:777-780.
- 9 L. Du, R. Peng, A. Björkman, N. F. de Miranda, C. Rosner, A. Kotnis, M. Berglund, C. Liu, R. Rosenquist, G. Enblad, C. Sunström, M. Hojjat-Farsangi, H. Rabbani, M. R. Teixeira, P. Revy, A. Durandy, Y. Zeng, A. R. Gennery, J.-P. de Villartay, **Q. Pan-Hammarström**. 2012. Cernunnos influences human immunoglobulin class switch recombination and may be associated with B cell lymphomagenesis. *J Exp Med.* 209:291-305.
- 10 N. F. C. C. de Miranda, R. Peng, K. Georgious, C. Wu, E. Sörqvist, M. Berglund, K. Lagerstedt, F. Roos, T. van Wezel, R. Rosenquist, C. Sundström, G. Enblad, M. Nilsson, Y. Zeng, D. Kipling, **Q. Pan-Hammarström**. 2013. DNA repair genes are selectively mutated in diffuse large B-cell lymphomas. *J Exp Med.* 210:1729-1742.
- 11 E. Enerval, L. Du, T. Visnes, A. Björkman, E. Lindgren, J. Wincent, G. Borck, L. Colleaux, V. Cormier-Daire, D. C. van Gent, J. Pie, B. Puisac, S. Kracker, L. Hammarström, J.-P. de Villartay, A. Durandy, J. Schoumans, L. Ström, **Q. Pan-Hammarström**. 2013. Regulatory role for the cohesin loader NIPBL in non homologous end joining during immunoglobulin class switch recombination. *J Exp Med.* 210:2503-2513.
- 12 N. F. C. C. de Miranda, L. Chen, K. Georgious, C. Wu, Z. Gao, S. Lisboa, G. Enblad, M. R. Teixeira, Y. Zeng, R. Peng, **Q. Pan-Hammarström**. 2014. Exome sequencing reveals novel mutation targets in diffuse large B-cell lymphomas derived from Chinese patients. *Blood.* 124:2544-2553.
- 13 J. Qian, Q. Wang, M. Dose, N. Pruett, K.-R. Kieffer-Kwon, W. Resch, G. Liang, Z. Tang, E. Mathé, C. Benner, W. Dubois, S. Nelson, L. Vian, T. Y. Oliveira, M. Jankovic, I. T. Silva, O. Hakim, K. Yao, A. Gazumyan, C. T. Mayer, R. Pavri, P. Awasthi, B. Song, G. Liu, L. Chen, S. Zhu, L. Feigenbaum, L. Staudt, C. Murre, Y. Ruan, D. F. Robbiani, **Q. Pan-Hammarström**<sup>#</sup>, M. C. Nussenzweig<sup>#</sup> and R. Casellas<sup>#</sup>. B cell super-enhancers recruit AID tumorigenic activity. 2014. *Cell.* 59:1524-37. <sup>#</sup>, contributed equally.
- 14 A. Björkman, P. Qvist, L. Du, M. Bartish, A. Zaravinos, K. Georgious, A. Børglum, R. A. Gatti, T. Törngren, **Q. Pan-Hammarström**. 2015. Aberrant recombination and repair during immunoglobulin class switching in BRCA1-deficient human B cells. *Proc Natl Acad Sci U S A.* 112:2157-62.
- 15 K. Wu, X. Zhang, F. Li, D. Xiao, D. Y. Hou, S. Zhu, D. Liu, X. Ye, M. Ye, J. Yang, L. Shao, H. Pan, N. Lu, Y. Yu, L. Liu, J. Li, L. Huang, H. Tang, Q. Deng, Y. Zheng, L. Peng, G. Liu, X. Gu, P. He, Y. Gu, W. Lin, H. He, G. Xie, H. Liang, N. An, H. Wnag, M. Teixeira, J. Vieira, W. Liang, X. Zhao, Z. Peng, F. Mu, X. Zhang, X. Xu, H. Yang, K. Kristiansen, J. Wang, N. Zhong, J. Wang<sup>#</sup>, **Q. Pan-Hammarström**<sup>#</sup>, J. He<sup>#</sup>. 2015. Frequent alterations in cytoskeleton remodelling genes in primary and metastatic lung adenocarcinomas. *Nat Commun.* Dec 9;6:10131. doi: 10.1038/ncomms10131. <sup>#</sup> shared senior author.
- 16 K. Georgiou, L. Chen, M. Berglund, N. FCC de Miranda, S. Lisboa, M. Fangazio, W. Ren, A. Zaravinos, S. Zhu, Y. Hou, K. Wu, W. Fang, X. Wang, H. Zhang, L. Zhang, Y. Zeng, G. Bhagat, M. Nordenskjöld, C. Sundström, R. Dalla-Favera, G. Enblad, M. R. Teixeira, L. Pasqualucci, R. Peng, **Q. Pan-Hammarström**. 2016. Genetic basis of *PD-L1* overexpression in diffuse large B-cell lymphomas. *Blood.* 127:3026-34.
- 17 P. G. Bronson, D. Chang, T. Bhangale, M. F. Seldin, W. Ortmann, R. C. Ferreira, E. Urcelay, L. Fernandez Pereira, J. Martin, A. Plebani, V. Lougaris, V. Firman, T. Freiburger, J. Litzman, V. Thon, **Q. Pan-Hammarström**, L.

- Hammarström, R. R. Graham, T. W. Behrens. 2016. Common variants at *PVT1*, *ATG13-AMBRA1*, *AH11* and *CLEC16A* are associated with selective IgA deficiency. 2016. *Nat Genet.* 48:1425-1429.
- 18 H. Abolhassani, E. S. J. Edwards, A. Ikinciogullari, H. Jing, S. Borte, M. Buggert, L. Du, S. Bade, R. Romano, R. Caridha, Y. Zhang, J. Frederiksen, M. Fang, S. Haskologlu, S. K. Bal, F. Dogu, N. Tacyildiz, H. F. Matthews, J. J. McElwee, A. Aghamohammadi, B. Boisson, N. Rezaei, A. Karlsson, M. J. Lenardo, J.-L. Casanova, L. Hammarström, S. G. Tangye, H. C. Su, **Q. Pan-Hammarström**. 2017. Combined immunodeficiency and Epstein-Barr virus-induced B cell malignancy in humans with inherited CD70 deficiency. *J Exp Med.* 214:91-106.
- 19 A. Björkman, L. Du, M. van der Burg, V. Cormier-Daire, G. Borck, J. Pie, B-M. Anderlid, L. Hammarström, L. Ström, J.-P. de Villartay, D. Kipling, D. Dunn Walters, **Q. Pan-Hammarström**. 2018. Reduced immunoglobulin gene diversity in patients with Cornelia de Lange syndrome. *J Allergy Clin Immunol.* 141:408-411.
- 20 W. Ren, X. Ye, H. Su, W. Li, D. Liu, M. Pirmoradian, X. Wang, B. Zhang, Q. Zhang, L. Chen, M. Nie, Y. Liu, B. Meng, H. Huang, W. Jiang, Y. Zeng, W. Li, K. Wu, Y. Hou, K. Wiman, Z. Li, H. Zhang, R. Peng, S. Zhu, **Q. Pan-Hammarström**. 2018. Genetic landscape of hepatitis B virus-associated diffuse large B-cell lymphoma. *Blood.* 131:2670-2681.