Nanye Long

Institute for Cyber Enabled Research (ICER)
Michigan State University

Professional History

ICER, Michigan State University

Research Specialist   Jul 2017 -

Duke Clinical Research Institute
Duke Center for Applied Genomics & Precision Medicine

Research Scholar   Nov 2016 - Jun 2017

University of North Carolina–Chapel Hill, Eshelman School of Pharmacy

Statistical Geneticist   Aug 2014 - Oct 2016

Academic Training

Duke University School of Medicine

Postdoctoral Researcher   Jul 2011- Jul 2014

University of Wisconsin–Madison

PhD, Animal science   May 2011
Advisor: Prof. Daniel Gianola

MS, Statistics   Dec 2009

Minor, Computer science

University of Science and Technology of China

BS, Biology   Sept 2001 – Jun 2005

Peer-reviewed publications

Genetics and genomics (∗ corresponding author)

22. Dai Z, **Long N** and Huang W (2020) Influence of genetic interactions on polygenic prediction. *G3*, 10(1):109-115

21. Cirulli ET, Nicoletti P, Abramson K, Andrade RJ, Bjornsson ES, Chalasani NP, Fontana RJ, Hallberg P, Li Y-J, Lucena M, **Long N**, Molokhia M, Nelson MR, Odin JA, Pirmohamed M, Rafnar T, Serrano J, Stefansson K, Stolz A, Daly AK, Aithal GP and Watkins PB (2019) A Missense Variant in PTPN22 is a Risk Factor for Drug-induced Liver Injury. *Gastroenterology*, 156(6):1707-1716

20. Beaudoin J, **Long N**, Liangpunsakul S, Puri P, Kamath P, Shah V, Sanyal A, Crabb D, Chalasani N and Urban TJ (2017) An Exploratory Genome-Wide Analysis of Genetic Risk for Alcoholic Hepatitis. *Scandinavian Journal of Gastroenterology*, 52(11):1263-1269

19. Urban TJ, Nicoletti P, Chalasani N, Serrano J, Stolz A, Daly A, Aithal G, Dillon J, Navarro V, Odin J, Barnhart H, Ostrov D, **Long N**, Cirulli ET, Watkins PB and Fontana RJ (2017) Minocycline Hepatotoxicity: Clinical characterization and identification of HLA−B∗35:02 as a risk factor. *Journal of Hepatology*, 67(1):137-144

18. de Boer YS, Kosinski AS, Urban TJ, Zhao Z, **Long N**, Chalasani N, Kleiner DE and Hoofnagle JH for the Drug-Induced Liver Injury Network (2016) Features of Autoimmune Hepatitis in Patients with Drug-induced Liver Injury. *Clinical Gastroenterology and Hepatology*, 15(1):103-112.

17. Church RJ, Gatti DM, Urban TJ, **Long N**, Yang X, Shi Q, Eaddy JS, Mosedale M, Ballard S, Churchill GA, Navarro V, Watkins PB, Threadgill DW and Harrill AH (2015) Sensitivity to Hepatotoxicity due to Epigallocatechin Gallate is affected by Genetic Background in Diversity Outbred Mice. *Food and Chemical Toxicology*, 76:19-26.

16. Ornella L, Pérez P, Tapia E, González-Camacho JM, Burgueño J, Zhang X, Singh S, Vicente F S, Bonnett D, Dreisigacker S, Singh R, **Long N** and Crossa J (2014) Genomic-enabled prediction with classification algorithms. *Heredity*, 112:616-626.

15. **Long N**∗, Dickson SP, Maia JM, Kim HS, Zhu Q and Allen AS (2013) Leveraging prior information to detect causal variants via multi-variant regression. *PLoS Computational Biology*, 9(6):e1003093.

14. Boligon AA, **Long N**, Albuquerque LG, Weigel KA, Gianola D and Rosa GJM (2012) Comparison of selective genotyping strategies for prediction of breeding values in a population undergoing selection. *Journal of Animal Science*, 90:4716-4722.

13. Huang W, **Long N** and Khatib H (2012) Genome-wide identification and initial characterization of bovine long non-coding RNAs from EST data. *Animal Genetics*, 43:674-682.

12. **Long N**∗, Gianola D, Rosa GJM and Weigel KA (2011) Application of support vector regression to genome-assisted prediction of quantitative traits. *Theoretical and Applied Genetics*, 123:1065-1074.

11. **Long N**∗, Gianola D, Rosa GJM and Weigel KA (2011) Marker-assisted prediction of non-additive genetic values. *Genetica*, 139:843-854.

10. **Long N**∗, Gianola D, Rosa GJM and Weigel KA (2011) Long-term impacts of genome-enabled selection. *Journal of Applied Genetics*, 52:467-480.

9. Ober U, Erbe M, **Long N**, Porcu E, Schlather M and Simianer H (2011) Predicting genetic values: a kernel-based best linear unbiased prediction with genomic data. *Genetics*, 188:695-708.

8. **Long N***, Gianola D, Rosa GJM and Weigel KA (2011) Dimension reduction and variable selection for genomic selection: application to predicting milk yield in Holsteins. *Journal of Animal Breeding and Genetics*, 128(4):247-257.

7. **Long N***, Gianola D, Rosa GJM, Weigel KA, Kranis A and González-Recio O (2010) Radial basis function regression methods for predicting quantitative traits using SNP markers. *Genetics Research*, 92(3):209-225. Top five most-read papers in 2010

6. Weigel KA, de los Campos G, González-Recio O, Naya H, Wu X-L, **Long N**, Rosa GJM and Gianola D (2009) Predictive ability of direct genomic values for lifetime net merit of Holstein sires using selected subsets of single nucleotide polymorphism markers. *Journal of Dairy Science*, 92(10):5248-5257.

5. **Long N***, Gianola D, Rosa GJM, Weigel KA and Avendaño S (2009) Comparison of classification methods for detecting associations between SNPs and chick mortality. *Genetics Selection Evolution*, 41:18. Highly accessed

4. **Long N***, Gianola D, Rosa GJM, Weigel KA and Avendaño S (2008) Marker-assisted assessment of genotype by environment interaction: A case study of single nucleotide polymorphism-mortality association in broilers in two hygiene environments. *Journal of Animal Science*, 86:3358-3366.

3. González-Recio O., Gianola D, **Long N**, Weigel KA, Rosa GJM and Avendaño S (2008) Non-parametric methods for incorporating genomic information into genetic evaluations: an application to mortality in broilers. *Genetics*, 178(4):2305-2313.

2. **Long N***, Gianola D, Rosa GJM, Weigel KA and Avendaño S (2007) Machine learning classification procedure for selecting SNPs in genomic selection: application to early mortality in broilers. *Journal of Animal Breeding and Genetics*, 124(6):377-389.

1. Wang Y, Li W, Zhang T, Ding C, Lu Z, **Long N**, Rose JP, Wang BC and Lin D (2005) Reconstruction of ancient genome and gene order from complete microbial genome sequences. *Journal of Theoretical Biology*, 239(4):494-498.

Collaborative research

8. Yang Z, **Long N**, Wang Y, Zhou X, Liu Y and Sun L (2016) A great volcanic eruption around AD 1300 recorded in lacustrine sediment from Dongdao Island, South China Sea. *Journal of Earth and System Science*, 126:7

7. Huang T, Sun L, **Long N**, Wang Y and Huang W (2013) Penguin tissue as a proxy for relative krill abundance in East Antarctica during the Holocene. *Scientific Reports*, 3:2807.

6. He X, Sun L, Xie Z, Huang W, **Long N**, Li Z and Xing G (2012) Sea ice in the Arctic Ocean: Role of shielding and consumption of methane. *Atmospheric Environment*, 67:8-13.

5. Jia N, Sun L, He X, You K, Zhou X and **Long N** (2012) Distributions and impact factors of antimony in topsoils and moss in Ny-Ålesund, Arctic. *Environmental Pollution*, 171:72-77.

4. Yuan L, Sun L, Wei G, **Long N**, Xie Z and Wang Y (2011) 9,400 yr BP: the mortality of mollusk shell (*Mya truncata*) at high Arctic is associated with a sudden cooling event. *Environmental Earth Sciences*, 63(6):1385-1393.

3. Yuan L, Sun L, **Long N**, Xie Z, Wang Y and Liu X (2010) Seabirds colonized Ny-Ålesund, Svalbard, Arctic ~ 9,400 years ago. *Polar Biology*, 33(5):683-691.

2. Li Y, Li W, Pan Y, Lu Y, **Long N**, Tao X and Yu H (2009) Rosette-forming Glioneuronal Tumour of the Fourth Ventricle with Previous Intratumoural Haemorrhage: Case Report and Review of the Literature. *Journal of International Medical Research*, 37(3):958-966.

1. Xie Z, Sun L, **Long N**, Zhang L, Kang S, Wu Z, Huang Y and Ju X (2003) Analysis of the distribution of chemical elements in Adélie penguin bone using synchrotron radiation X-ray fluorescence. *Polar Biology*, 26(3):171-177.