The Jackson Laboratory

Leading the search for tomorrow's cures

Ron Korstanje, PhD, FAHA

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Education:

1994 B.Sc. in Biochemistry, HZ University of Applied Science, Vlissingen, The Netherlands.

1996 M.Sc. in Molecular Biology, Leiden University, The Netherlands.

2000 Ph.D. in Molecular Genetics, Utrecht University, The Netherlands.

Work experience/Positions:

2001-2004 Postdoctoral Fellow, The Jackson Laboratory, Bar Harbor, ME, USA.

2004-2006 Research Associate, Faculty of Medical Sciences, Medical Biology division, University of Groningen, The Netherlands.

2006-2007 Assistant Professor, Faculty of Medical Sciences, Medical Biology division, University of Groningen, The Netherlands.

2007-2011 Research Scientist, The Jackson Laboratory, Bar Harbor, ME, USA.

2010-present Adjunct Faculty, Graduate School of Biomedical Science and Engineering, University of Maine

2011-2013 Senior Research Scientist, The Jackson Laboratory, Bar Harbor, ME, USA.

2011-2013 Visiting Professor, College of the Atlantic, Bar Harbor, ME, USA

2011-present Adjunct Faculty, Mount Desert Island Biological Laboratory, Bar Harbor, ME

2013-2015 Resident Supervisor of The Jackson Laboratory's Summer Student Program.

2013-present Assistant Professor, The Jackson Laboratory, Bar Harbor, ME, USA

2015-present Assistant Professor, Department of Medicine, Tufts School of Medicine, Boston, USA.
2015-present Co-director, Nathan Shock Center of Excellence in the Basic Biology of Aging at The Jackson Laboratory.

2017-2018 Resident Supervisor of The Jackson Laboratory's Summer Student Program.

2019-present Associate Professor, The Jackson Laboratory, Bar Harbor, ME, USA

Professional Activities

Board Memberships:
2012-2016 American Heart Association Founders Affiliate Research Committee.
2019-2022 Member of the Board of Directors American Aging Association.
2020-present Member of the European Innovative Training Network

Grant Review Panels:
2012-2018 American Heart Association Cardiorenal 3 and Cardiorenal 2 study sections.
2013 Ad hoc reviewer NIH KMBD study section.
2013 Member NHLBI review panel "Functional Assays to Screen Genomic Hits"
2014-present External Referee Kidney Research UK
2016 External Referee Wellcome Trust
2016 Ad hoc reviewer NIH Cellular Mechanisms in Aging and Development (CMAD) study section
2017 Member NIH review panel ZDK1-GRB-S (J1) Diabetes Research Centers (P30)
2019 Member NIH review panel ZDK1-GRB-S (J1) Diabetes Research Centers (P30)

Meeting Organization:
2004 Co-organizer 4th Complex Trait Consortium Meeting, Groningen, The Netherlands.
2014 Co-organizer UCONN-JAX Aging Meeting, Storrs, CT
2014 Co-organizer 28th International Mammalian Genome Conference, Bar Harbor, ME
2016 Co-organizer Comparative and Experimental Approaches to Aging Biology Research course, Bar Harbor, ME
2018 Co-organizer Comparative and Experimental Approaches to Aging Biology Research course, Bar Harbor, ME
2020 Co-organizer Immersion in Comparative Aging and Regenerative Biology course, Bar Harbor, ME

Editorial Boards:
2015-present Member - Physiological Genomics
2015-2016 Guest Editor special issue Mammalian Genome "The Genetics of Aging"
2020-present Member - Geroscience

Ad hoc Manuscript Reviews for Peer Reviewed Journals
European Journal of Human Genetics, American Journal of Physiology-Renal Physiology, Disease Models & Mechanisms, Physiological Genomics, Genetics, Journal of the American Society of Nephrology, Kidney International, PLOS Genetics.

Education and Teaching:
2011 Organizing and teaching ‘Molecular Biology’ course, College of the Atlantic.

2013	Organizing and teaching 'Molecular Biology' course, College of the Atlantic.
2016-present	Member Curriculum Committee Masters in Bioinformatics program, University of Maine
2016-present	Member Admissions Committee Masters in Bioinformatics program, University of Maine
2019-present	Member Admissions Committee Graduate School of Biomedical Science and Engineering, University of Maine

Extramural Research Support

Current
Alport Syndrome Foundation, Korstanje (PI)
Pharmaceutical Targeting of Alport Syndrome Modifier Genes
Role: PI

RO1 ES29916 Churchill, Reinholdt, Korstanje (PI)
NIH/NIEHS Genetic factors that influence arsenic toxicology
Role: PI

3-SRA-2018-5290M-B Krolewski (PI)
JDRF Resequencing and functional analyses of two candidate genes contributing to progression to ESRD in Type 1 diabetes
Role: consortium PI

P30 AG038070 Churchill, Peters, Korstanje (PI)
NIH/NIA The Jackson Laboratory Nathan Shock Center of Excellence in the Basic Biology of Aging
Role: Co-principal investigator and Core Leader

U54 OD020351 Burgess (PI)
NIH/ The Jackson Laboratory Pilot Center for Precision Genetics
Role: Project Leader

Completed
R01 HL081162 Korstanje (PI)
NIH/NHLBI Cloning QTL Genes for Plasma HDL Cholesterol
Role: Principal Investigator

R37 HL077796 Paigen (PI)
NIH/NHLBI From QTL to Gene for HDL Cholesterol
Role: Co-Investigator

R01 HL095668 Korstanje (PI)
NIH/NHLBI Mapping Gene Mutations that Alter HDL Cholesterol Levels in Mice
Role: Principal Investigator

R01 HL095668-1Z Korstanje (PI)
NIH/NHLBI Mapping Gene Mutations that Alter HDL Cholesterol Levels in Mice - ARRA Administrative Supplement
Role: Principal Investigator

Bayer Pharmacuetical Grants4targets Korstanje (PI)
Inhibiting Fatty Acyl CoA Reductase 2 to Prevent Renal Damage

Role: Principal Investigator

P50 GM076468 Churchill (PI)
NIH/NIGMS Genome Dynamics: Evolution, Organization and Function
Role: Project Leader

5 U24 DK076169 Korstanje (PI)
Diabetes Complications Consortium
Gene Expression Analysis in the Black Bear Kidney: a First Step Towards Understanding Recovery in Mammalian Kidneys
Role: Principal Investigator

AHA Cardiovascular Genome Phenome Study, Vidal (PI)
Integrated genetic, transcriptomic, and epigenetic analysis of cardiovascular disease phenotypes.
Role: Co-Principal Investigator

The Jackson Laboratory Director Innovation Fund
Sequencing the black bear genome
Role: Principal Investigator

Invited Seminars

2020 International Podocyte Meeting, Manchester, UK
2019 Yale University, New Haven, CT
2019 Keynote lecture, Husson University, Bangor, ME
2019 IDEXX, Portland, ME
2018 MDIBL, Bar Harbor, ME
2017 Keynote address, University of New England, Biddeford, ME
2017 Alport Syndrome Workshop, Glasgow, UK
2017 University at Buffalo, Buffalo, NY
2017 Perelman School of Medicine, University of Pennsylvania, Phildelphia, PA
2016 American Society of Nephrology Renal Week, Chicago, Il
2016 Tufts Medical School, Boston, MA
2015 Boehringer Ingelheim, Ridgefield, CT
2015 University Medical Center Groningen, The Netherlands
2015 Experimental Biology, Boston, MA
2014 University of Mississippi Medical Center, Jackson MS
2013 American Society of Nephrology Renal Week, Atlanta GA
2011 Nefrologie dagen, Veldhoven, The Netherlands
2010 Baxter Healthcare, Chicago
2010 Discovery Luncheon, Naples Fl
2009 Medical College Wisconsin, Milwaukee
2007 Manchester University, United Kingdom
2006 Nefrologie dagen, Veldhoven, The Netherlands
2005 Mario Negri Institute, Bergamo Italy
2005 Postdoctoral seminars, Hanover Medical School, Hanover, Germany
2005 3rd European Short Course, Charles River, Strasbourg, France
2003 International Lipid Meeting Leipzig, Germany

Postdoctoral Fellows/Students

Past Postdoctoral Fellows (and current position):

2012-2014 Anna Reznichenko (Associate Principal Bioinformatics Scientist, AstraZeneca, Sweden)
2013-2016 Theun de Groot (Postdoctoral fellow, University of Nijmegen, The Netherlands)
2012-2017 George Sutphin (Assistant Professor, University of Arizona, Tucson)
2016-2018 Philipp Tauber (Assistant Professor, University of Regensburg, Germany)

Past Predoctoral Students (and current position):

2005-2011 Jelena Kamilic (Emergency doctor, Slingeland Hospital, The Netherlands)
2009-2013 Seungbum Choi (Research Assistant Professor, Yonsei University, South Korea)
2016-2017 Nicholas Cutter

Graduate Student Committee Member for:

2016 Nicholas Cutter (University of Maine)
2015 Sarah McCarthy (University of Maine)
2015 Gerda Noordmans (Groningen University)
2013 Seungbum Choi (University of Maine)
2011 Jelena Kamilic (Groningen University)
2008 Karen Svenson (Groningen University)

Undergraduate students (past and current):

Leanne Kosse (2015)
Joline Kraak (2014-2015)
Dewi Blom (2014)
Lena Ebert (2013-2014)
Yuka Takemon (2013-2014)
Jo Vogel (2011-2012)
Konstantin Deutsch (2011-2012)
Augusta Blandford (2011)
Bradley Clemens (2008-2009)

Rotation Graduate Students

Elli Hartig, Tufts (2020)
Teresa Easterbrooks, UMaine (2019)
Candice Byers, Tufts (2017)
Dmitriy Skoog, UMaine (2016)
Nicholas Cutter, UMaine (2015)

Summer Students:

Bailey Hixon (2018)
James Meija (2018)
Selena Neptune-Bear (2017)
Erika Estrada (2017)
Demetri Maxim (2015)
Caroline Corban (2015)
Grant Backer (2014)
Teresa Liu (2014)
India Stewart (2013)
Yuka Takemon (2013)
Pooja Potharaju (2012)
Nahum Buzaglo (2012)
Carlos Diaz (2012)

Sarah Tran (2011)
Rebecca Kim (2011)
Helen Cha (2009)
Jacqueline Rodriguez (2009)
Lydia Valdez (2009)
Sarah Amend (2008)
Ruksana Rangwala (2008)
Melissa Spurr (2002)
Laura Ayotte (2001)

Publications (peer reviewed) 87:

2019

De Groot T, Ebert LK, Christensen B, Andralojc K, Cheval L, Doucet A, Mao C, Baumgarten R, Low BE, Sandhoff R, Wiles MV, Deen PMT, **Korstanje R** (2019) Identification of *Acer2* as a first susceptibility gene for lithium-induced NDI in mice. *Journal of the American Society of Nephrology* 30(12):2322-2336.

Olinger E, Lake J, Sheehan S, Schiano G, Takata T, Tokonami N, Debaix H, Consolato F, Rampoldi L, **Korstanje R**, Devuyst O (2019) Hepsin-mediated processing of uromodulin is crucial for salt-sensitivity and thick ascending limb homeostasis. *Scientific Reports* 9(1):12287

Sheehan S, Mawe S, Cianciolo RE, **Korstanje R**, Mahoney JM (2019) Detection and classification of novel renal histological phenotypes using deep neural networks. *American Journal of Pathology*. Pii: S0002-9440(19)30298-06

Bubier JA, Sutphin GL, Reynolds TJ, **Korstanje R**, Fuksman-Kumpa A, Baker EJ, Langston MA, Chesler EJ (2019) Integration of heterogeneous functional genomics data in gerontology research to find genes and pathway underlying aging across species. *PLoS ONE.* 14(4):e0214523

Srivastava A, Kumar Sarsani V, Fiddes I, Sheehan SM, Seger RL, Barter ME, Neptune-Bear S, Lindqvist C, Brody LC, Mullikin JC, **Korstanje** (2019) Genome assembly and gene expression in the American black bear provides new insights into the renal response to hibernation. *DNA Research* 26(1):37-44

2018

Michael J. Thompson, Liudmilla Rubbi, Aldons J Lusis, **Ron Korstanje,** Richard C. Davis, Gary A. Churchill, Steve Horvath**,** Matteo Pellegrini (2018) A multi-tissue lifespan epigenetic clock for mice. *Aging* 10(10):2832-2854

Sheehan S and **Korstanje R** (2018) Automatic glomerular identification and quantification of histological phenotypes using image analysis and machine learning. *American Journal of Physiology: Renal Physiology* 315(6):F1644-F1651.

Backer G, Eddy S, Sheehan SM, Takemon Y, Reznichenko A, Savage HS, Low BE, Wiles MV, Kretzler M, **Korstanje R** (2018) FAR2 is associated with kidney disease in mice and humans. *Physiological Genomics* 50(8):543-552.

Raghupathy N, Choi K, Vincent MJ, Beane GL, Sheppard K, Munger SC, **Korstanje R**, Pardo-Manual de Villena F, Churchill GA (2018) Hierarchical Analysis of Multi-mapping RNA-Seq Reads Improves the Accuracy of Allele-specific Expression *Genome Research* 34(13):2177-2184

2017

de Groot T, Daamen L, Kosse L, Alsady M, Doty R, Baumgarten R, Sheehan S, van der Vlag J, **Korstanje R**, Deen PMT (2017) Lithium reduces blood glucose levels, but aggravates albuminuria in BTBR-*ob/ob* mice *PLOS ONE* 12(12):e0189485

Alsady M, de Groot T, Kortenoeven ML, Bekkenkamp-Grovenstein M, Engelke U, Wevers RA, Baumgarten R, **Korstanje R**, Deen PMT (2017) Lithium induces aerobic glycolysis and glutaminolysis in collecting duct principal cells *AJP Renal Physiology* 314(2):F230-F239

Tian C, Longo-Guess C, Gagnon L, **Korstanje R**, Sheehan SM, Ohlemiller KK, Johnson KR (2017) Hearing loss without overt metabolic acidosis in ATP6V1B1 deficient MRL mice, a new genetic model for nonsyndromic deafness with enlarged vestibular aquaducts. *Human Molecular Genetics* 26(19):3722-3735.

Korstanje R, Ryan JL, Savage HS, Lyons BL, Kane KG, Sukoff Rizzo SJ (2017) Continuous Glucose Monitoring in female NOD Mice Reveals Daily Rhythms and a Negative Correlation with Body Temperature. *Endocrinology* 158(9):2707-2712

Pouwel, S, Faiz A, den Boef L, Gras R, van den Berge M, Boezen HM, **Korstanje R**, ten Hacken N, van Oosterhout A, Heijnk I, Nawijn M (2017) Genetic variance is associated with susceptibility for cigarette smoke-induced DAMP release in mice. *AJP Lung Cellular and Molecular Physiology* 313(3):L559-L580

Sutphin GL, Backer G, Sheehan S, Bean S, Corban C, Liu T, Peters MJ, van Meurs JBJ, Murabito JM, Johnson AD, **Korstanje R** (2017) *C. elegans* Orthologs of Human Genes Differentially Expressed with Age are Enriched for Determinants of Longevity. *Aging Cell* 16(4):672-682

Snyder EM, McCarty C, Mehalow A, Svenson KL, Murray SA, **Korstanje R**, Braun R (2017) APOBEC1 complementation factor (A1CF) is dispensable for C-to-U RNA editing in vivo. *RNA* 23(4):457-465

2016

Sutphin GL, Mahoney JM, Sheppard K, Walton DO, **Korstanje R** (2016) WORMHOLE: Novel Least Diverged Ortholog Prediction through Machine Learning. *PLoS Computational Biology* 12(11):e1005182

Korstanje R, Deutsch K, Bolanos-Palmieri P, Hanke N, Schroder P, Staggs L, Bräsen JH, Roberts ISD, Sheehan S, Savage H, Haller H, Schiffer M (2016) Loss of kynurenine 3-monooxygenase in zebrafish and mice causes proteinuria. *Journal of the American Society of Nephrology*. 27(11):3271-3277.

Bogue MA, Peters LL, Paigen B, **Korstanje R**, Yuan R, Ackert-Bicknell C, Grubb SC, Churchill GA, Chesler EJ. (2016) Accessing Data Resources in the Mouse Phenome Database for Genetic Analysis of Murine Life Span and Health Span. *J Gerontol A Biol Sci Med Sci* 71(2):170-177.

2015

Peters MJ et al (117 authors) **co-senior author** (2015) The transcriptional landscape of age in human peripheral blood. *Nature Communications* 6;8570.

Noordmans GA, Hillebrands JL, van Goor H, **Korstanje R** (2015) A Roadmap for the Genetic Analysis of Renal Aging. *Aging Cell* 14(5):725-733.

Ackert-Bicknell CL, Anderson LC, Sheehan S, Hill WG, Chang B, Churchill GA, Chesler EJ, **Korstanje R**, Peters LL (2015) Aging Research Using Mouse Models *Curr Protoc Mouse Biol*. 2015 Jun 1;5(2):95-133

Randles M, Woolf A, Huang J, Byron A, Humphries J, Price K, Kolasti-Joannou M, Collinson S, Denny T, Knight D, Mironov A, Starborg T, **Korstanje R**, Hunphries M, Long D, Lennon R (2015) Genetic background is a key determinant of glomerular extracellular matrix composition and organization. *Journal of the American Society of Nephrology* 26(12):3021-3034.

Pouwels S, Heijink I, Brouwer U, Gras R, den Boef L, Boezen HM, **Korstanje R**, van Oosterhout A, Nawijn M (2015) Genetic variation associates with susceptibility for cigarette smoke-induced neutrophilia in mice. *AJP- Lung Cellular and Molecular Physiology* 308(7):L693-709.

Reznichenko A, **Korstanje R** (2015) The Role of Platelet-Activating Factor in Mesangial Pathophysiology. *American Journal of Pathology* 185(4):888-896.

2014

Noordmans GA, Huang Y, Savage H, van Dijk MCRF, Schaart G, van den Bergh Weerman MA, Heeringa P, Hillebrands JL, **Korstanje R**, van Goor H (2014) Genetic analysis of intracapillary glomerular lipoprotein deposits in aging mice. PLoS ONE 9(10):e111308.

Ananda G, Hinerfeld D, **Korstanje R** (2014) Whole genome sequence of the C57L/J mouse inbred strain. *G3* 4(9):1689-1692.

Huang Y, Caputo CR, Noordmans GA, Yazdani S, Monteiro LH, van den Born J, van Goor H, Heeringa P, **Korstanje R**, Hillebrands JL (2014) Identification of novel genes associated with renal tertiary lymphoid organ formation in aging mice. *PLOS ONE* 9(3):e91850.

Gbadegesin RA, Hall G, Adebowale Adeyemo, Hanke N, Tossidou I, Burchette J, Wu G, Homstad A, Sparks MA, Gomez J, Jiang R, Alonso A, Lavin P, Conlon P, **Korstanje R**, Stander MC, Shamsan G, Barua M, Spurney R, Singhal PC, Kopp JB, Haller H, Howell D, Pollak MP, Shaw AS, Schiffer M, Winn MP (2014) Mutations in the F-actin binding gene *ANLN* is a cause of FGSG. *Journal of the American Society of Nephrology* 25(9):1991-2002.

Korstanje R, Caputo C, Doty R, Cook S, Bronson R, Davisson M, Miner J (2014) A splice site mutation in mouse Col4a4 with abnormal collagen IV protomers: genetic background affects the Alport syndrome phenotype. *Kidney International* 85(6):1461-1468.

2013

Walkin L, Herrick SE, Summers A, Brenchley PEC, Hoff CM, **Korstanje R**, Margetts PJ (2013) The role of mouse strain differences in the susceptibility to fibrosis - A systematic review. *Fibrogenesis & Tissue Repair* 6:18

Choi S, **Korstanje R** (2013) Proprotein convertases in high-density lipoprotein metabolism. *Biomarker Research* 18:27

Choi S, Aljakna A, Srivastava U, Peterson BR, Deng B, Prat A, **Korstanje R** (2013) Decreased APOE-containing HDL subfractions and cholesterol efflux capacity of serum in mice lacking *Pcsk9*. *Lipids in Health and Disease* 12:112
Kirsch T, Kaufeld J, **Korstanje R**, Hentschel DM, Staggs L, Bollig F, Beese M, Schroder P, Boehme L, Haller H, Schiffer M (2013) Knockdown of the hypertension associated gene nostrin alters glomerular barrier function in zebrafish (Danio rerio) *Hypertension* 62(4):726-730

Noordmans GA, Caputo RC, Huang Y, Sheehan SM, Bulthuis M, Heeringa P, Hillebrands JL, van Goor H, **Korstanje R** (2013) Genetic analysis of mesangial matrix expansion in aging mice and identification of *Far2* as a candidate gene. *Journal of the American Society of Nephrology* 24:1995-2001.

Ackert-Bicknell C, Paigen B, **Korstanje R** (2013) Recalculation of 23 mouse HDL QTL datasets improves accuracy and allows for better candidate gene analysis. *Journal of Lipid Research* 54(4):984-994

Long DA, Kolatsi-Joannou M, Price KL, Dessapt-Baradez C, Huang JL, Papakrivopoulou E, Hubank M, **Korstanje R**, Gnudi L, Woolf AS (2013) Albuminuria: too few glomeruli and too much testosterone. *Kidney International* 83(6):1118-1129.

2012

Srivastava U, Paigen B, **Korstanje R** (2012) Differences in Health Status Affect Susceptibility and Mapping of Genetic Loci for Atherosclerosis in Inbred Mice. *ATVB* 32(10):2380-2386.

Aljakna A, Hageman RS, Ritchie MD, Gu T, Wilke RA, Turner SD, Svenson K, Churchill GA, Hibbs M, McCarty CA, **Korstanje R** (2012) Pla2g12b and Hpn are HDL-regulating Genes Identified by ENU Mutagenesis in the Mouse and HPN is Associated with HDL Cholesterol Levels in Human. *PLoSOne* 7(8):e43139.

Margetts PJ, Hoff C, Liu L, **Korstanje R**, Walkin L, Summers A, Herrick S, Brenchley P (2012) Transforming Growth Factor B Induced Peritoneal Fibrosis is Mouse Strain Dependent. *NDT* (Epub ahead of print).

Zhang W, **Korstanje R**, Thaisz J, Staedtler F, Harttman N, Xu L, Feng M, Yanas L, Yang H, Valdar W, Churchill GA, DiPetrillo K (2012) Genome-wide Association Mapping of Quantitative Traits in Outbred Mice. *G3: Genes| Genomes| Genetics* 2(2):167-174.

2011

Kamilic J, Hamming I, Lely AT, **Korstanje R**, Schulze U, Poppinga WJ, Turner AJ, Clarke NE, van Goor H, Navis G (2011) Rat *Ace* allele variation determines susceptibility to AngII induced renal damage. *JRAAS* 12(4):420-429.

Leduc MS, Lyons M, Darvishi K, Walsh K, Sheehan S, Amend S, Cox A, Orho-Melander M, Kathiresan S, Paigen B, **Korstanje R** (2011) The Mouse QTL Map Helps Interpret Human Genome-Wide Association Studies for HDL Cholesterol. *Journal of Lipid Research* 52(6):1139-1149.

Aylor DL, Valdar W, Foulds-Mathes W, Buus RJ, Verdugo RA, Baric RS, Ferris MT, Frelinger JA, Heise M, Frieman MB, Gralinski LE, Bell TA, Didion JP, Hua K, Nehrenberg DL, Powell CL, Steigerwalt J, Xie Y, Kelada SNP, Collins FS, Yang IV, Schwartz DA, Branstetter LA, Chesler EJ, Miller

DR, Spence J, Liu EY, McMillan L, Sarkar A, Wang J, Wang W, Zhang Q, Broman KW, **Korstanje R**, Durrant C, Mott R, Iraqi FA, Pomp D, Threadgill D, Pardo-Manuel de Villena F, Churchill GA (2011) Genetic Analysis of Complex Traits in the Emerging Collaborative Cross. *Genome Research* 21(8):1213-1222.

Hageman RS, Leduc MS, **Korstanje R**, Paigen B, Churchill GA (2011) A Bayesian framework for inference of the genotype-phenotype map for segregating populations. *Genetics* 187(4):1163-1170

Sinke A, Caputo C, Tsaih S, Yuan R, Ren D, Deen P, **Korstanje R** (2011) Genetic analysis of plasma sodium concentration in mice and identification of *Nalcn*, a novel player in osmoregulation. *Physiological Genomics* 43(5):265-270

Hageman RS, Leduc MS, Caputo C, Tsaih SW, Churchill GA, **Korstanje R** (2011) Uncovering Genes and Regulatory Pathways Related to Urinary Albumin Excretion in Mice. *Journal of the American Society of Nephrology* 22(1):73-81.

Nawijn MC, Piavaux BJA, Jeurink PV, Gras R, Luinge MA, Stearns T, Foote S, Hylkema MN, Groot PC, **Korstanje R**, Van Oosterhout AJM (2011) Identification of the MHCII region as an asthma susceptibility locus in recombinant congenic mice. *American Journal of Respiratory Cell and Molecular Biology* 308(7):L693-709

2010

Su Z, Leduc MS, **Korstanje R**, Paigen B (2010) Untangling HDL QTL on chromosome 5 and identifying *Scarb1* and *Acads* as the underlying genes. *Journal of Lipid Research* 51(9):2706-2713.

Cox A, Sheehan S, Kloting I, Paigen B, **Korstanje R** (2010) Combining QTL Data for HDL Cholesterol Levels from Two Different Species Leads to Smaller Confidence Intervals. *Heredity* 105(5):426-432.

Garret M, Pezzolesi M, **Korstanje R** (2010) Integrating human, rat, and mouse data to identify the genetic factors involved in chronic kidney disease. *Journal of the American Society of Nephrology* 21(3):398-405.

Tsaih S, Pezzolesi M, Yuan R, Warram JH, Krolewski A, **Korstanje R** (2010) Genetic analysis of albuminuria in the aging mouse. *Kidney International* 77(3):201-210.

2009

Xing S, Yuan R, Svenson K, Jorgenson L, So M, Paigen B, **Korstanje R** (2009) Genetic influence on electrocardiogram time intervals and heart rate in aging mice. *AJP Heart and Circulatory Physiology* 296(6) H1907-1913.

Kamilic J, Lely AT, van Goor H, Buikema H, Tent H, Navis GJ, **Korstanje R** (2009) Differential *ACE* expression among tissues in allele-specific Wistar rat lines. *Mammalian Genome* 20(3):170-179.

2008

Korstanje R, Desai J, Lazar G, King BL, Rollins J, Spurr M, Joseph J, Kadambi S, Li Y, Cherry A, Matteson PG, Paigen B, Millonig JH. (2008) Quantitative trait loci affecting phenotypic variation in the vacuolated lens mouse mutant, a multigenic mouse model of neural tube defects. *Physiological Genomics* 35(3):296-304.

Ishimori N, Stylianou I, **Korstanje R**, Marion M, Li R, Donehue LR, Rosen C, Beamer W, Paigen B, Churchill (2008) Quantitative trait loci for bone mineral density in an SM/J by NZB/BINJ intercross population and identification of *Trps1* as a probable candidate gene. *Journal of Bone and Mineral Research* 23(9):1529-1537

Su Z, **Korstanje R**, Tsaih S, Paigen B (2008) Candidate genes for obesity revealed fro a C57BL/6Jx129S1/ SvImJ intercross. *International Journal of Obesity* 32:1108-1189

Doorenbos C, Tsaih S, Sheehan S, Ishimori N, Navis G, Churchill G, DiPetrillo K, **Korstanje R**. (2008) Quantitative Trait Loci for urinary albumin in crosses between C57BL/6J and A/J inbred mice in the presence and absence of *Apoe*. *Genetics* 179:693-699.

Matteson PG, Desai J, **Korstanje R**, Lazar G, Borsuk TE, Rollins J, Kadambi S, Joseph J, Rahman T, Wink J, Benayed R, Paigen B, Millonig JH. (2008) The orphan G protein coupled receptor, Gpr161, encodes the vacuolated lens locus and controls neurulation and lens development. *PNAS* 105(6):2088-2093.

2007

Hamming I, Cooper ME, Haagmans BL, Hooper NM, **Korstanje R**, Osterhaus AD, Timens W, Turner AJ, Navis G, van Goor H. (2007) The emerging role of ACE2 in physiology and disease. *Journal of Pathology* 212(1):1-11.

2006

Stylianou J, **Korstanje R**, Li R, Sheehan S, Paigen B, Churchill G (2006) Detailed QTL analysis for obesity reveals multiple networks of interacting loci. *Mammalian Genome* 17:22-36. (G 2.7)

Ishimori N, Li R, Walsh KA, **Korstanje R**, Rollins JA, Petkov P, Pletcher MT, Wiltshire T, Donahue LR, Rosen CJ, Beamer WG, Churchill GA, Paigen B (2006) Quantitative trait loci that determine bone mineral density in C57BL/6J and 129S1/SvImJ inbred mice. *Journal of Bone and Mineral Research* 21:105-112. (6.5)

2005

Wang X, Ishimori N, **Korstanje R**, Rolins J, Paigen B (2005) Identifying novel genes for atherosclerosis through mouse-human comparative genetics. *American Journal of Human Genetics* 77:1-16. (G 12.6)

Lyons MA, **Korstanje R**, Li R, Sheehan SM, Walsh KA, Rollins JA, Carey MC, Churchill GA, Paigen B (2005) Single and interacting QTLs for cholesterol gallstones revealed in an intercross between mouse strains NZB and SM. *Mammalian Genome,* 16:152-163.

2004

Pletcher MT, McClurg P, Batalov S, Su SI, Barnes SW, Lagler E, **Korstanje R**, Wang X, Nusskern D, Bogue MA, Mural RJ, Paigen B, Wiltshire T. (2004) Use of a dense single nucleotide polymorphism map for *in silico* mapping in the mouse. *PLoS Biology*, 2:e393

Korstanje R, Eriksson P, Samnegard A, Olsson, Forsman-Semb K, Sen S, Churchill G, Rollins J, Harris S, Hamsten A, Paigen B (2004) Locating *Ath8*, a locus for murine atherosclerosis susceptibility and testing several of its candidate genes in mice and humans. *Atherosclerosis,* 177:443-450.

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