

CURRICULUM VITAE

NAME: Luanne L. Peters

EDUCATION:

1977 BA University of Maine, Orono, ME (Zoology)
1979 MS Indiana University, Indianapolis, IN (Physiology/Endocrinology)
1983 MT St. Vincent's Medical Center, Indianapolis, IN (American Society
of Clinical Pathology Certification in Medical Technology)
1988 PhD University of Maine and The Jackson Laboratory (Zoology/Genetics)

CURRENT POSITION:

2011-present Professor
The Jackson Laboratory
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CURRENT APPOINTMENTS:

2012-present Adjunct Professor
Feinstein Institute for Medical Research
Manhasset, NY
2013-present Affiliated Professor
Tufts University School of Medicine, Boston, MA
2011-present Graduate Faculty
University of Maine, Orono, ME
2012-present Co-director, Jackson Laboratory Nathan Shock Center of Excellence in
Basic Biology of Aging

PRIOR APPOINTMENTS:

2010-2011 Member
Lindsley F. Kimball Research Institute
New York Blood Center
310 East 67th Street
New York, NY 10065
2005-2010 Professor
The Jackson Laboratory
Bar Harbor, ME 04609
2000-2010 Director, The Jackson Laboratory National Institutes of Health
(NHLBI) Program for Genomic Applications
2008-2010 Director, The Jackson Laboratory Aging Center
2000-2005 Associate Professor
The Jackson Laboratory
Bar Harbor, ME 04609
1994-2000 Assistant Professor
The Jackson Laboratory
600 Main Street
Bar Harbor, ME 04609
1993-1994 Instructor in Pediatrics
Children's Hospital

Division of Hematology/Oncology
Harvard Medical School
Boston, MA 02115

POST DOCTORAL TRAINING:

- 1991-1993 Children's Hospital, Division of Hematology/Oncology
Harvard Medical School and Dana Farber Cancer Institute
Boston, MA 02115
- 1988-1991 The Jackson Laboratory
Bar Harbor, ME 04609

FELLOWSHIPS AND AWARDS:

- 1999-2002 Established Investigator, American Heart Association
1995-1997 March of Dimes Basil O'Connor Starter Scholar
1994-1996 20th Mallinckrodt Scholar
Edward Mallinckrodt, Jr., Foundation, St. Louis, MO.
1989 Phi Kappa Phi
1987-1988 University of Maine Graduate Research Fellowship
1986 Maine Heart Association Graduate Research Fellowship

PROFESSIONAL ASSOCIATIONS:

- 1996-present International Mammalian Genome Society
1992-present American Society of Hematology

EDITORIAL BOARDS

- 2003-2008 Blood
2118-present Associate Editor, Red Blood Cell Physiology in *Frontiers in Physiology*

PROFESSIONAL ACTIVITIES

- 1995-present *Ad Hoc* Reviewer; Am J Hematol, Blood, Genomics, J Biol Chem, J Cell Science, Mamm Genome, Nat Genet, PNAS, Human Mutation, Am J Human Genet, Traffic, Nat Biotech, J Med Genet, J Clin Invest, J Gerontology, Plos Genetic, Exp Gerontology, Molecular Medicine, Mechs of Aging and Development, Mol Medicine, BMC Hematology,
- 1999 NIH HEME-1 Special Emphasis Panel (NSRA)
2000-2002 NIH HEME-1 (Temporary Member)
2000-2008 NHLBI Program for Genomic Applications Coordinating Committee
2001 Special Review Panel, NICHD, Heritable Disorders Branch
2002 NHLBI Special Emphasis Panel (Program Project)
2003-2007 NHLBI ELB Study Section
2004 NHLBI Special Emphasis Panel ZRG1 HEME-C 04
2004 NHLBI Special Emphasis Panel RFA HL-04-008
2004 NHLBI Special Emphasis Panel ZRG1 HEME-D 04
2004 NHLBI Special Workshop on Coagulation Testing in Mice
2005 American Geriatric Society Workshop on Animal Models of Anemia of Aging
2007 NIH GHD Study Section (*Ad Hoc*)
2008 NHLBI Special Emphasis Panel (PPG)
2009 NIH GHD Study Section (*Ad Hoc*)
2009 NHLBI Special Emphasis Panel (RFA-HL-09-002, NHLBI Cardiac Development Consortium (U01))
2009-2010 NHLBI ELB Study Section
2010-2012 NHLBI MCH Study Section
2012 NHLBI RFA Review - Mechanisms of Terminal Erythroid Maturation

2012	ZRG1 BCMB-A 51 R, RFA RM11-006: Transformative R01 Roadmap Review
2012-present	NHLBI Resequencing and Genotyping Service Review Panel
2013	Vice Chair, Red Cell Gordon Research Conference
2015	Chair, Red Cell Gordon Research Conference
2016	NIDDK Special Emphasis Panel ZDK1 GRB-R M4, Cooperative Hematology Specialized Core Centers
2016	NHLBI MCH Study Section (<i>Ad Hoc</i>)
2017	Special Emphasis Panel 2017/05 ZRG1 VH-J (02), Vascular and Hematology
2017	NHLBI MCH Study Section (<i>Ad Hoc</i>)

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ORIGINAL REPORTS:

1. Ben-Jonathan N, Neill M, Arbogast LA, **Peters LL**, Hoefler MT. 1980. Dopamine in hypophysial portal blood: Relationship to circulating prolactin in pregnant and lactating rats. **Endocrinology** 106:690-696.
2. **Peters LL**, Hoefler MT, Ben-Jonathan N. 1981. The posterior pituitary: Regulation of anterior pituitary prolactin secretion. **Science** 213:659-661.
3. Ben-Jonathan N, **Peters LL**. 1982. Posterior pituitary lobectomy: Differential elevation of plasma prolactin and luteinizing hormone in estrous and lactating rats. **Endocrinology** 110:1861-1865.
4. **Peters LL**, Wood BG. 1987. The prenatal development of the organ of Zuckerkandl in rats. **Life Sci** 41:1355-1359.
5. **Peters LL**, Wood BG, Grimm JK. 1989. Pituitary intracisternal granule formation during the estrus cycle of the rat. **Tissue Cell** 21:11-15.
6. **Peters LL**, Starr EC, Wood BG, Barker JE. 1990. Heritable severe combined anemia and thrombocytopenia in the mouse: Description of the disease and successful therapy. **Blood** 76:745-754.
7. **Peters LL**, Birkenmeier CS, Bronson R, White RA, Lux SE, Bennett V, Otto E, Higgins A, Barker JE. 1991. Purkinje cell degeneration associated with erythroid ankyrin deficiency in *nb/nb* mice. **J Cell Biol** 114:1233-1241.
8. **Peters LL**, White RA, Birkenmeier CS, Bloom ML, Lux SE, Barker JE. 1992. Changing patterns in cytoskeletal mRNA expression and protein synthesis patterns during murine erythropoiesis in vivo. **Proc Natl Acad Sci USA** 89:5749-5753.
9. White RA, Birkenmeier CS, **Peters LL**, Barker JE, Lux SE. 1992. Murine erythrocyte ankyrin cDNA: Highly conserved regions of the regulatory domain. **Mamm Genome** 3:281-285.
10. White RA, **Peters LL**, Adkison LR, Korsgren C, Cohen CM, Lux SE. 1992. The pallid mutation: Murine platelet storage pool disease associated with the protein 4.2 (pallidin) gene. **Nat Genet** 2:80-83.

11. **Peters LL**, Birkenmeier CS, Barker JE. 1992. Fetal compensation of the hemolytic anemia in mice homozygous for the normoblastic, *nb*, mutation. **Blood** 80:2122-2127. *Selected for cover photo.*
12. **Peters LL**, Turtzo LC, Birkenmeier CS, Barker JE. 1993. Distinct fetal Ank-1 and Ank-2 related proteins and mRNAs in normal and *nb/nb* mice. **Blood** 81:2144-2149.
13. Birkenmeier CS, White RA, **Peters LL**, Hall EH, Lux SE, Barker JE. 1993. Characterization of alternative transcripts of the mouse erythroid ankyrin gene identifies complex patterns of splicing and multiple 5' and 3' ends. **J Biol Chem** 268:9533-9540.
14. **Peters LL**, Andrews NC, Eicher EM, Davidson MB, Orkin SH, Lux SE. 1993. Mouse microcytic anemia caused by a defect in the gene encoding the globin enhancer-binding protein NF-E2. **Nature** 362:768-770.
15. **Peters LL**, Barker JE. 1993. Novel inheritance of the murine severe combined anemia and thrombocytopenia (*scat*) phenotype. **Cell** 74: 135-142.
16. Harris N, **Peters LL**, Eicher EM, Rits M, Raspberry D, Eichbaum QG, Super M, Ezekowitz RAB. 1994. The exon-intron structure and chromosomal localization of the mouse macrophage mannose receptor gene, *Mrc1*: Identification of a ricin-like domain at the N-terminus of the receptor. **Biochem Biophys Res Commun** 198: 682-692.
17. **Peters LL**, Eicher EM. 1994. The ubiquitous subunit of the globin enhancer-binding protein NF-E2 (*Nfe2u*) maps to mouse chromosome 5. **Genomics** 22:490-491.
18. **Peters LL**, Eicher EM, Azim A, Chishti AH. 1995. The erythrocyte membrane skeleton protein dematin (*Epb4.9*) maps to mouse chromosome 14. **Genomics** 26:634-635.
19. **Peters LL**, John KM, Lu FM, Eicher EM, Higgins A, Yialamas M, Turtzo LC, Otsuka AJ, Lux SE. 1995. *Ank3* (epithelial ankyrin), a widely distributed new member of the ankyrin gene family and the major ankyrin in kidney, is expressed in alternatively spliced forms, including those that lack the repeat domain. **J Cell Biol** 130:313-330.
20. Piepenhagen PA, **Peters LL**, Lux SE, Nelson WJ. 1995. Differential expression of Na⁺-K⁺-ATPase, ankyrin, fodrin, and E-cadherin along the kidney nephron. **Am J Physiol** 269:C1417-C1432.
21. **Peters LL**, Kirley LA, Kim AC, Chishti AH. 1996. Localization of the gene encoding the erythrocyte membrane skeleton protein p55 (*Mpp1*) on the mouse X chromosome. **Mamm Genome** 7:245-246.
22. Gwynn B, Eicher EM, **Peters LL**. 1996. Genetic localization of *Cd63*, a member of the transmembrane 4 superfamily, reveals two distinct loci in the mouse genome. **Genomics** 35:389-391.
23. **Peters LL**, Ciciotte SL, Lin L, Chishti AH. 1996. The mouse homolog of the *Drosophila* discs large tumor suppressor gene maps to chromosome 16. **Mamm Genome** 7:619-620.
24. **Peters LL**, Shivdasani RA, Liu S-C, Hanspal M, John K, Gonzalez J, Brugnara C, Gwynn B, Mohandas N, Alper SL, Orkin S, Lux SE. 1996. Anion exchanger 1 (band 3) is required to prevent erythrocyte membrane surface loss but not to form the membrane skeleton. **Cell** 86:917-927.
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58. Bruce LJ, Beckmann R, Ribeiro ML, **Peters LL**, Chasis JA, Delaunay J, Mohandas N, Anstee DJ, Tanner MJA. 2003. A band 3-based macrocomplex of integral and peripheral proteins in the red cell membrane. **Blood** 101:4180-4188.
59. Pecaut MJ, Nelson GA, **Peters LL**, Kostenuik PJ, Bateman TA, Morony S, Stodieck LS, Lacey DL, Simske SJ, Gridley DS. 2003. Effects of spaceflight in the C57BL/6 mouse I: Immune population distributions. **J App Physiol** 94: 2085-2094.
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65. Gwynn B, Martina JA, Bonifacino JS, Sviderskaya EV, Lamoreux LM, Bennett DC, Moriyama K, Huizing M, Helip-Wooley A, Gahl WA, Webb LS, Lambert AJ, **Peters LL**. 2004. Reduced pigmentation (*rp*), a mouse model of Hermansky-Pudlak syndrome, encodes a novel component of the BLOC-1 complex. **Blood** 104: 3181-3189. *Selected by editors for "Inside Blood" commentary.*
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69. **Peters LL**, Zhang W, Lambert AJ, Brugnara C, Churchill GA, Platt OS. 2005. Quantitative trait loci for baseline white blood cell count, platelet count, and mean platelet volume. **Mamm Genome** 16, 749-763.
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73. Gwynn B, Smith RS, Rowe LB, Taylor BA, **Peters LL**. 2006. A mouse TRAPP related protein is involved in pigmentation. **Genomics** 88, 196-203.
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