We claim:

1. A mouse whose genome comprises a knockout of an endogenous *Pint* long non-coding RNA (lncRNA) locus, wherein the knockout results in the mouse exhibiting

(a) a premature aging-associated phenotype;

(b) a slower growth rate than that of a wild type control;

(c) a decline in muscle strength;

(d) fibrosis;

(e) a lower body fat content than that of the wild type control;

(f) a lower femur bone mineral density and bone mass than that of the wild type control;

(g) a decreased muscle mass as compared with that of the wild type control;

(h) a decrease in median longevity;

(i) lordokyphosis;

(j) organ atrophy; or

(k) a combination of any of (a)-(j).

2. The mouse of claim 1, wherein the knockout comprises a deletion of one or more exons that encode the *Pint* lncRNA or a portion thereof.

3. The mouse of claim 2, wherein the knockout comprises:

(a) a deletion of one or more exons within the *Pint* lncRNA locus starting in a second exon of the endogenous *Pint* lncRNA locus;

(b) a deletion of one or more exons within the *Pint* lncRNA locus starting in a first exon of the endogenous *Pint* lncRNA locus; or

(c) a deletion of an entire RNA coding region of the endogenous *Pint* lncRNA locus.

4. The mouse of claim 1, wherein the mouse further comprises a knock-in of an insert nucleic acid within the endogenous *Pint* lncRNA locus or a portion thereof.

5. The mouse of claim 4, wherein the insert nucleic acid comprises a first nucleotide sequence that encodes a reporter.

6. The mouse of claim 5, wherein the first nucleotide sequence is operably linked to a

promoter that drives expression of the reporter.

7. The mouse of claim 5, wherein the first nucleotide sequence that encodes the reporter is positioned in the *Pint* lncRNA locus in operable linkage with an endogenous *Pint* lncRNA promoter, wherein the endogenous *Pint* lncRNA promoter drives expression of the first nucleotide sequence.

8. The mouse of claim 7, wherein the expression of the first nucleic acid sequence follows an expression pattern of *Pint* lncRNA.

9. The mouse of claim 5, wherein the first nucleotide sequence comprises a Kozak consensus sequence.

10. The mouse of claim 4, wherein
(a) the insert nucleic acid replaces one or more exons within the endogenous *Pint* lncRNA locus starting in the second exon of the endogenous *Pint* lncRNA locus;
(b) the insert nucleic acid replaces one or more exons within the endogenous *Pint* lncRNA locus starting in the first exon of the endogenous *Pint* lncRNA locus; or
(c) the insert nucleic acid replaces the entire RNA coding region of the endogenous *Pint* lncRNA locus.

11. The mouse of claim 5, wherein the reporter is any of β-galactosidase, Green Fluorescent Protein (GFP), enhanced Green Fluorescent Protein (eGFP), mPlum, mCherry, tdTomato, mStrawberry, J-Red, DsRed, mOrange, mKO, mCitrine, Venus, YPet, enhanced yellow fluorescent protein (EYFP), Emerald, CyPet, cyan fluorescent protein (CFP), Cerulean, T-Sapphire, luciferase, alkaline phosphatase, or a combination thereof.

12. The mouse of claim 4, wherein the insert nucleic acid further comprises a second nucleic acid sequence that encodes a selectable marker, wherein the second nucleic acid sequence is operably linked to a promoter.

13. The mouse of claim 12, wherein the insert nucleic acid comprises site-specific recombination sites flanking a segment encoding the reporter and/or a segment encoding

the selectable marker.

14. The mouse of claim 1, wherein the mouse is homozygous for the knockout of the endogenous *Pint* lncRNA locus.

15. A method of obtaining a cell, tissue, or embryo comprising deriving a cell, tissue or embryo from a mouse whose genome comprises a knockout of an endogenous *Pint* long non-coding RNA (lncRNA) locus, wherein the knockout results in the mouse exhibiting
(a) a premature aging-associated phenotype;
(b) a slower growth rate than that of a wild type control;
(c) a decline in muscle strength;
(d) fibrosis;
(e) a lower body fat content than that of the wild type control;
(f) a lower femur bone mineral density and bone mass than that of the wild type control;
(g) a decreased muscle mass as compared with that of the wild type control;
(h) a decrease in median longevity;
(i) lordokyphosis;
(j) organ atrophy; or
(k) a combination of any of (a)-(j).

16. A method for making a mouse comprising a knockout of an endogenous *Pint* lncRNA locus, the method comprising:
(a) contacting a mouse embryonic stem (ES) cell with a targeting construct comprising an insert nucleic acid flanked by 5′ and 3′ homology arms; wherein the targeting construct undergoes homologous recombination with the endogenous mouse *Pint* lncRNA locus in a genome of the mouse ES cell to form a modified mouse ES cell;
(b) introducing the modified mouse ES cell into a host mouse embryo; and
(c) gestating the host mouse embryo in a surrogate mouse mother, wherein the surrogate mouse mother produces mouse progeny comprising the knockout of the endogenous *Pint* lncRNA locus,
wherein the knockout results in the mouse progeny exhibiting
(a) a premature aging-associated phenotype;
(b) a slower growth rate than that of a wild type control;
(c) a decline in muscle strength;

(d) fibrosis;
(e) a lower body fat content than that of the wild type control;
(f) a lower femur bone mineral density and bone mass than that of the wild type control;
(g) a decreased muscle mass as compared with that of the wild type control;
(h) a decrease in median longevity;
(i) lordokyphosis;
(j) organ atrophy; or
(k) a combination of any of (a)-(j).

17. The method of claim 16, wherein contacting the mouse ES cell comprises:
(a) replacing one or more exons within the *Pint* lncRNA locus starting in the second exon of the *Pint* lncRNA locus with the insert nucleic acid;
(b) replacing one or more exons within the *Pint* lncRNA locus starting in the first exon of the *Pint* lncRNA locus with the insert nucleic acid; or
(c) replacing the entire RNA coding region of the *Pint* lncRNA locus with the insert nucleic acid.

18. The method of claim 15, wherein the cell is an embryonic stem cell.

19. A mouse whose genome comprises a replacement of at least one kilobase of the *Pint* lncRNA locus with an insert nucleic acid,
wherein the replacement starts in the second exon of the *Pint* lncRNA locus,
wherein the insert nucleic acid comprises a nucleotide sequence encoding either or both (i) β-galactosidase and (ii) a selectable marker,
wherein the insert nucleic acid is positioned in the *Pint* lncRNA locus in operable linkage with an endogenous *Pint* lncRNA promoter that drives expression of the insert nucleic acid, and
wherein the mouse exhibits a phenotype of
(a) a premature aging-associated phenotype;
(b) a slower growth rate than that of a wild type control;
(c) a decline in muscle strength;
(d) fibrosis;
(e) a lower body fat content than that of the wild type control;
(f) a lower femur bone mineral density and bone mass than that of the wild type control;

(g) a decreased muscle mass as compared with that of the wild type control;
(h) a decrease in median longevity;
(i) lordokyphosis;
(j) organ atrophy; or
(k) a combination of any of (a)-(j).

20. The mouse of claim 19, wherein the insert nucleic acid replaces at least 10 kb of the endogenous *Pint* locus.

21. The mouse of claim 19, wherein the insert nucleic acid replaces at least 20 kb of the endogenous *Pint* locus.

22. The mouse of claim 19, wherein the insert nucleic acid replaces at least 30 kb of the endogenous *Pint* locus.

23. The mouse of claim 19, wherein the insert nucleic acid replaces at least 32 kb of the endogenous *Pint* locus starting at exon 2 and ending at the last annotated exon.

24. The mouse of claim 19, wherein the insert nucleic acid replaces the genomic sequence between genomic coordinates Chromosome 6: 31166026-31197846.

25. The mouse of claim 24, wherein the insert nucleic acid further comprises a Kozak consensus sequence.

26. The mouse of claim 25, wherein the insert nucleic acid encodes β-galactosidase but not the selectable marker.

27. The mouse of claim 25, wherein the insert nucleic acid encodes the selectable marker but not β-galactosidase.

28. The mouse of claim 25, wherein the insert nucleic acid comprises site-specific recombination sites flanking a segment encoding β-galactosidase and/or a segment encoding the selectable marker.

29. The mouse of claim 25, wherein the mouse is homozygous for the modified endogenous *Pint* lncRNA locus.