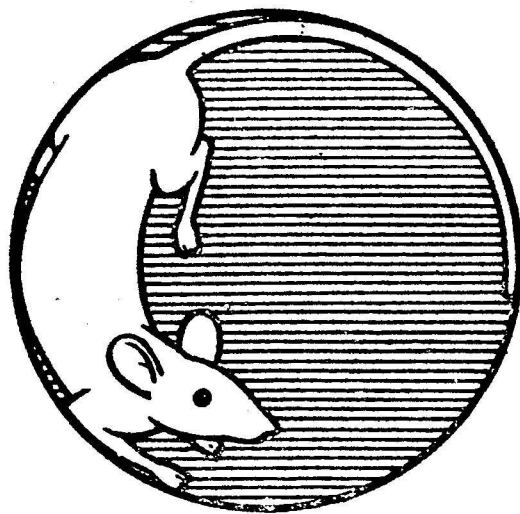


MOUSE NEWS LETTER

No. 8



FEBRUARY · 1953

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Collated by T.C. Carter, M.A., Ph.D.
Institute of Animal Genetics,
West Mains Road,
Edinburgh 9,
Scotland.

Produced and distributed by Laboratory Animals Bureau,
M.R.C. Laboratories,
Holly Hill,
Hampstead,
London, N.W.3.
England.

MAJ-GEN C. TURNER

Floyd C. Turner

Letter to Mr. P. on the President of
Box 807,
Faulder Creek,
California,
U.S.A.

Dated: 10 Nov 52

Received: 20 Nov 52

Mouse stocks.

C3H/He
DBA/2J
BALB/c

These inbred strains were obtained from Dr. W.E. Heston of the National
Institute in 1947. The symbol is being adopted to designate sub-
strains maintained by Dr. Floyd C. Turner.

UNIVERSITY OF CALIFORNIA

E.D. Garber

Naval Biological Laboratory,
Naval Supply Center,
Oakland 4,
California,
U.S.A.

Dated: 24 Nov 52

Received: 9 Dec 52

Mutant stocks. Bent-tail (Bn) and Tabby (Ta), both sex-linked mutations;
bare (be)

Publications.

Garber, E.D. 1952. "Bald", a second allele of hairless in the house mouse
J. Hered. 43:45-46.

Garber, E.D. 1952. A dominant, sex-linked mutation in the house mouse.
Science 116:89.

Garber, E.D. 1952. "Bent-tail", a dominant, sex-linked mutation in the
mouse. Proc. Nat. Acad. Sci. 38:876-879.

COLUMBIA UNIVERSITY

New York 27,
N. Y.,
U.S.A.

Dated: 12 Dec 52
Received: 17 Dec 52

(A) Robert Auerbach
L. C. Dunn
S. Gluecksohn-Waelsch
Reba Mirsky Goodman
Max Hamburg
Naomi Fitch Rabin
Lois Jean Smith

(A) Genetics Laboratory, Dept. of Zoology.

Stocks. No change.

(B) Nevis Biological Station, Irvington, N.Y.

(B) L.C. Dunn
Walter C. Morgan, Jr.
Joan Suckling

Standard Stocks: Bagg Albino F88
Strain A

Mutant stocks: Black Brachyury F15
Brachyury Line 11 (from Jackson Lab) BC9F5
Ruby aniridia F12
Crooked
Tail-short
Tailless W₁ (lethal) F3 (from New York wild)
Tailless W₂ (viable) F3 (from New York wild)
Tailless W₃ F3 (from Mystic, Conn. wild)
Ectopic lens F7
Ectopic lens (Bagg albino BC2F2)
Angulated F8
Wild from Dr. H. Schneider, Rockefeller Institute,
N. Y. (Colony-inbred since 1946)
Hook (from S. Holman) F6

Stocks dropped: Ruby(a) open lid (anophthalmia)

Publications (A) & (B):

Dunn, L.C. and Mohr, J. (1952). An association of hereditary eye defects with white spotting. P.N.A.S. 38:872-875

Dunn, L.C. and Morgan, W.C.Jr. (1952). A mutable locus in wild populations of house mice. Amer.Nat., 86:321-323.

Dunn, L.C. and Gluecksohn-Waelsch, S. (1952). The genetic behavior of seven new mutant alleles which arose in one balanced lethal line in the house mouse. Genetics, 37:577 (Abstract).

Dunn, L.C. and Morgan, W.C.Jr. (1952) Mutations at a mutable locus (t) in wild Mus musculus. Genetics, 37:578 (Abstract).

Morgan, W.C.Jr. (1952). A new Crooked mutation, in the mouse. Genetics, 37:607 (Abstract).

Change of address

From 1 Feb 53 S.Glucksohn-Waelsch will be at:-

Department of Obstetrics and Gynecology,
College of Physicians and Surgeons,
Columbia University,
630 West 168th Street,
New York 32,
N.Y.

EDINBURGH

(University Department & A.R.C. Staff)

Institute of Animal Genetics,
West Mains Road,
Edinburgh, 9,
Scotland.

N. Bateman
R.A. Beatty
Mrs. Ruth Clayton
D.S. Falconer
J.W.B. King
W.R. Sobey
St. C. Taylor

Dated: 16 Dec 52

Received: 16 Dec 52

Standard stocks No change.

Special stocks. Delete Webster-Swiss strain.

Mutant stocks. The following mutants are no longer maintained:
d^l, wb, fi, Lt, m, sh-1, sh-2, W^v.

Publications:-

Fischberg, M. & Beatty, R.A. 1952. "Heteroploidy in mouse embryos due to crossing of inbred strains". Evolution 6 (3):316-324.

Falconer, D.S. 1952. "Location of 'reeler' in linkage group III of the mouse". Heredity 6:255-257.

Falconer, D.S. & Latyszewski, M. 1952. "The environment in relation to selection for size in mice". J. Genet. 51:67-80.

Falconer, D.S. Slizynski, B.M. & Auerbach, C. 1952. "Genetical effects of nitrogen mustard in the house mouse". J. Genet. 51:81-88.

Falconer, D.S. 1952. "The problem of environment and selection". Amer. Nat. 86:293-298.

Change of address. W.R. Sobey will shortly be leaving the U.K.; his address after 1 March 53 will be :-

Genetics Section,
Commonwealth Scientific and Industrial Research Organisation
c/o Department of Zoology,
The University,
Sydney,
N.S.W.,
Australia.

Correction. The following errors in 'A review of independent segregation in the house mouse (Carter and Falconer, J. Genet. 50:399-413, 1952) have been kindly brought to our notice by Dr. D. Michie. We hope that anyone finding errors in this paper will tell us, to that corrections can be made.

Page 402 line dY, for "54 3.9 100" read "48 1.3 65."

" 405 square dY, for "46" read "45".

" 407 line Va b, for "4" read "14".

EDINBURGH

(M.R.C. Mouse Cytogenetics Group).

Institute of Animal Genetics,
West Mains Road,
Edinburgh 9,
Scotland.

T.C. Carter

Mary F. Lyon

Rita S. Phillips

J.L. Snee (attached from the
A.R.C. Group)

B.M. Slizynski

C.H. Waddington (Director).

Dated: 1 Jan 53

Received: 1 Jan 53

Inbred strains.

No change.

Mutants.

Add Bent, Bn, from E.D. Garber via D.S. Falconer.

Publications.

Carter, T.C. 1952. J. Genet. 51:1-6. "A mosaic mouse with an anomalous segregation ratio".

Carter, T.C. and Phillips, Rita S. 1952. Oxford Clarendon Press: in 'Biological Hazards of Atomic Energy', pp 73-81. "An experimental attempt to investigate the induction of visible mutations in mice by chronic gamma irradiation."

Falconer, D.S. Slizynski, B.M. and Auerbach, C. 1952. J. Genet. 51:81-88. "Genetical effects of nitrogen mustard in the house mouse."

HALLE.

Biologisches Institut,
Martin-Luther-Universität,
Halle (Saale),
Germany.

H. Freye
W. Hembold
P. Hertwig (Direktor)
H.G. Kunze

Dated : 24 Dec 52
Received : 6 Jan 53

Standard Stämme. Keine Änderung.

Mutationsstämme wie in MNL 2.

Veröffentlichungen.

Müller, Gerhard. Die embryonale Entwicklung eines sich rezessiv vererbenden Merkmals (Kolobom bei der Hausmaus). Wissenschaftliche Zeitschrift der Martin-Luther-Universität, Jahrgang I, 1951/52, Heft 4.

Thoms, Georg. Das histologische Verhalten von Milz, Leber und Knochenmark bei der erblichen Anämie röntgenmutierter Mäuse. Wissenschaftliche Zeitschrift der Martin-Luther-Universität, Halle-Wittenberg, Jahrgang I, 1951/52, Heft 4.

IOWA STATE COLLEGE

Department of Genetics,
Curtiss Hall,
Iowa State College,
Ames, Iowa,
U.S.A.

Dated: 1 Dec 52

Received: 11 Dec 52

Patricia Banach
John W. Gowen
Douglas Grahn
Loren H. Haverland
W.F. Hollander
Janice Stadler
Sarene Thompson
David A. Willermot

Mutant Stocks: No change

Publications: Grahn, Douglas (1952). Estimation of the genetic influence of growth and organ weight changes in mice following total body x-irradiation. Ph.D. Thesis, Iowa State College Library, Ames, Iowa.

Thompson, Sarene (1952). Serum proteins, leukocytes, and mortality of seven inbred mouse strains during cortisone administration and infection with Salmonella typhimurium. Ph.D. Thesis, Iowa State College Library, Ames, Iowa.

Gowen, John W., Janice Stadler, H.H. Plough, and Helen N. Miller (1951). On the chemical basis for typhoid resistance in mice. Abstract, Records, Genetics Society of America 20:101.

Gowen, John W. (In Press). Humoral and cellular elements in natural and acquired resistance to typhoid. American Journal of Human Genetics.

UNIVERSITY OF LONDON.

Department of Genetics,
University College,
Gower Street,
London W.C.1.
England.

M.S. Deol
H. Grüneberg
A.G. Searle
Gillian M. Truslove

Dated : 18 Dec 52

Received : 20 Dec 52

Stocks. No changes in standard strains or mutant stocks.

Publications:-

- Attfield, M. 1951. Inherited macrocytic anaemias in the house mouse. III. Red blood cell diameters. J. Genet. 50, 150-63.
- Carter, T.C. & Grüneberg, H. 1950. Linkage between fidget and agouti in the house mouse. Heredity 4, 373-6.
- Grüneberg, H. 1950a. Genetical studies on the skeleton of the mouse. I. Minor variations of the vertebral column. J. Genet. 50, 112-41.
- 1950b. Genetical studies on the skeleton of the mouse. II. Undulated and its "modifiers". J. Genet. 50, 142-73.
1951. The genetics of a tooth defect in the mouse. Proc. Roy. Soc., B. 138, 437-51.
1952. Genetical studies on the skeleton of the mouse. IV. Quasi-continuous variations. J. Genet. 51, 95-114.
- Searle, A.G. 1952. Inherited macrocytic anaemias of the house mouse. IV. The alleviating effect of blood injections. J. Genet. 51, 187-90.
- Truslove, G.M. 1952. Genetical studies on the skeleton of the mouse. V. "Inter-frontal" and "parted frontals". J. Genet. 51, 115-22.
- Weber, W. 1950. Genetical studies on the skeleton of the mouse. III. Skeletal variations in wild populations. J. Genet. 50, 174-8.

LOUISIANA STATE UNIVERSITY

Department of Surgery,
School of Medicine,
Louisiana State University,
1542 Tulane Avenue
New Orleans 12,
Louisiana,
U. S. A.

Walter J. Burdette
Charles H. Haddox,
Harriette Hyde,
Russell Nelson,

Dated: 1 Jul 52; 1 Jan 53

Received: 8 Jul 52; 12 Jan 53

Mouse stocks :-

<u>Strain</u>	<u>Inbred at LSU</u>	<u>Source</u>	<u>Date obtained</u>	<u>Genotype</u>
C3H	F13	J. Bittner	13 Oct 47	+
A	F10	A. Kirschbarm	5 Dec 48	<u>aa</u> <u>bb</u> <u>cc</u>
JK	F11	L.C. Strong	28 Sep 47	<u>aa</u> <u>bb</u> <u>pp</u> <u>sese</u>
LSU	F9	LSU	-	<u>aa</u> <u>pp</u>
WA	F3	Jax	20 Aug 52	<u>bb</u> <u>ff</u> <u>sh-2sh-2</u> <u>wa-2wa-2</u>

Publication

Burdette, W.J. Induced pulmonary tumors. J. Thoracic Surgery 24:427-433, 1952.

McGILL UNIVERSITY.

Department of Genetics,
McGill University,
Montreal,
Canada.

F.C. Fraser
H. Kalter
J.D. Metrakos
D.G. Trasler
B.E. Walker

Dated : 30 Dec 52
Received : 5 Jan 53

Stocks. No noteworthy changes in standard strains or mutant stocks.

Publications:-

Kalter, H., and Fraser, F.C. Hereditary differences in the reaction of mice to the teratogenic effects of cortisone. Genetics 37:593, 1952. (Abstract).

Boothroyd, E.R. and Walker, B.E. Somatic chromosome numbers in mice. Genetics 37:567, 1952.(Abstract).

NATIONAL INSTITUTES OF HEALTH

Laboratory Aids Branch,
National Institutes of Health,
Bethesda,
Maryland,
U.S.A.

George E. Jay, Jr.

Dated: 10 Dec 52
Received: 15 Dec 52

Stocks held.

(i) Additions SWR/N(F46)
 BL/N(F50)
 1194/N(F55)

All three strains were obtained from Dr Heston of the National Cancer Institute; his stocks were obtained from Dr Lynch, as he indicated in MNL6; the Laboratory Aids Branch stocks were founded after the strains had bred for one generation in Dr Heston's hands.

(ii) Deletion BRS/N

The original foundation animals obtained from Dr. L.C. Strong failed to breed and replacements have not been obtained.

OAK RIDGE

Mammalian Genetics and Development Section,
Biology Division,
Oak Ridge National Laboratory,
P.O. Box P,
Oak Ridge,
Tennessee,
U.S.A.

Dated: 24 Dec 52

Received: 29 Dec 52

Jane E. Crowell
Mary Nell Cupp
Josephine S. Gower
Gloria Jones Jasny
Elizabeth M. Kelly
J.C. Kile, Jr.
Mary Henderson Major
E.F. Oakberg
Liane Brauch Russell
W.L. Russell
Patricia A. Sarvella
Louis Wickham

Standard strains:- No change since MNL 5.

Recent mutants available on inbred background:-

- (i) Steel, (Sl), arose in C3H and has been maintained by brother-sister mating SlSl♂ x slsl♀ since its origin.
This is the mutant reported in MNL 6 as "white nose and dilution".
- (ii) Pearl, (pe), arose in C3H and has been maintained by brother-sister mating pepe♂ x Pepe♀
This mutant was first reported in MNL 5.
- (iii) High tail, occurred in BALB/c and has been maintained in a brother-sister mated line.
Mutant reported in MNL 5.

Mutant stocks:-

Changes in stocks reported in MNL 5:-

- (i) Delete stock 21.
- (ii) Stock 51 is AYabbdd.
- (iii) Stock 61 is AYabbpp.
- (iv) Stock Bbt is A^{Wa} Cabt/Ca?bt pc^{ch}/pc^{ch}.

Publications:-

Russell, W.L. 1951.
X-ray-induced mutations in mice.
Cold Spring Harbor Symposia on Quantitative Biology, 16:327-336.

Russell, Liane Brauch and W.L. Russell. 1952.
Radiation hazards to the embryo and fetus.
Radiology, 58(3):369-376.

Russell, Liane Brauch and Mary H. Major. 1952.
A preliminary report on radiation-induced presumed somatic
mutations in the house mouse. Genetics 37:621.

Russell, W.L. 1952.
Genetic effects of radiation in mammals.
Chapter 11, in "Radiation Biology", A. Hollaender, editor.
McGraw-Hill. (In press).

Russell, Liane Brauch. 1952.
The effects of radiation on mammalian prenatal development.
Chapter 12 in "Radiation Biology," A. Hollaender, editor.
McGraw-Hill. (In press).

OHIO STATE UNIVERSITY

Department of Zoology,
Ohio State University,
Columbus 10,
Ohio, U.S.A.

Paul F. Forsthoeftel
E.L. Green
Margaret C. Green
Caroline R. Madison

Dated: 5 Dec 52

Received: 19 Dec 52

Stocks. No changes since MNL 7.

Publications.

Madison, Caroline R., 1952. A search for quantitative differences in the normal constituents of the urine of short ear and normal mice. Jour. Exp. Zool., 120:457-468.

Green, E.L. A skeletal difference between sublines of the C3H strain of mice. To appear in Science.

PHILADELPHIA INSTITUTE FOR CANCER RESEARCH

Institute for Cancer Research, and
Lankenau-Hospital Research Institute,
Philadelphia 11,
Pennsylvania,
U.S.A.

E.G. Brown
S.T. Grinnell
T.S. Hauschka
A. Levan

Dated : 26 Dec 52
Received : 31 Dec 52

Standard strains: A/He, A/St, C3H/St, C3H_f/He, C57BL, C58, DBA (behaves immunologically like DBA/2), YBR/Wi, 129.

Special stocks, mutant stocks:

C3H subline selected for high incidence of open eyelid.

C3H short-eared subline.

C58 waved subline.

A/Ha selected for low sex-ratio at birth due to x1.

Publications :-

Hauschka, T.S., and Levan, A. (1953). Inverse relationship between chromosome ploidy and host-specificity of sixteen transplantable tumors. Experimental Cell Research, 4 (in press).

Hauschka, T.S. (1952). Immunologic Aspects of Cancer. A Review. Cancer Research 12:615-633.

----- (1953). Methods of conditioning the graft in tumor transplantation. J. Nat. Cancer Inst. 13 (in press).

SANTIAGO

Instituto de Biología 'Juan Noé';
Catedra de Biología,
Borgoño 1470,
Santiago,
Chile.

G. Hoecker, S
S. Markovic
A. Martinez
O. Pizarro

Dated: 24 Jun 52
Received: 7 Jul 52

Inbred strains

- AKR(F?⁺18). Orig: J. Furth through Clara Lynch. Fert: high.
Charact: lymphatic leukemia 80%.
- C57BL(F?⁺20). Orig: Bar Harbor.
- C58(F72+19). Orig: E.C. MacDowell. Charact: high susceptibility to
Trypanosoma cruzi infestation.
- C58-AW. Genet. A^WA^W. Orig: dominant somatic and gonadic mosaic
in a C58 male; subsequently inbred 10 generations.
Charact: high leukemia, as in C58; rare mammary and
sarcomatous tumors. Maintained by G. Hoecker S. in
Chile and J.L. Hoecker in Argentina. Ref. Biologica 12:
25-37, 1950.
- C3H(F?⁺15). Orig: Bar Harbor. Subline unknown. Charact: extremely
susceptible to Trypanosoma cruzi infestation: very low
capacity of discrimination on conditioned reflexes.
- DAAB(F?⁺19). Genet: aa bb. Orig: E.C. MacDowell. Charact: abnor-
malities of the eyes.
- DBA/1(F?⁺22). Orig: Bar Harbor.
- BALB(F?⁺22). Orig: E.D. MacDowell.
- ADW. Orig: E.C. MacDowell.
- SH(F?⁺21). Orig: E.C. MacDowell Genet: cc sh-lsh-l.
- Rockefeller(F?⁺8) Orig: Rockefeller Center, N.Y. Genet: albino. Charact:
high weight; very resistant to Trypanosoma cruzi
infestations. Ref: Biologica 8:43-53. 1950.

(Note. The strains here listed as DAAB, SH and Rockefeller do not appear in
the list of inbred strains given in Cancer Research 12:602-613, 1952: the
nomenclature used here is provisional. T.C.C.)

Other stocks.

89 Orig: E.C. MacDowell. Genet: cinnamon.
 Charact: circling and somersaulting.
Sd Orig: L.C. Dunn, Columbia University.
T Orig: L.C. Dunn, Columbia University.
hr^{rh} Orig: Clarke Fraser, McGill University, Montreal.
AY Orig: L.C. Dunn, Columbia University.

STOCKHOLM

Wallenberg Laboratory,
Institute for Cell Research and Genetics,
Karolinska Institutet,
Stockholm 60,
Sweden.

E.Klein
G.Klein
U.Lomakka
L.Revesz

Dated : 23 Dec 52
Received : 29 Dec 52

<u>Standard strains :</u>	<u>Obtained from :</u>	<u>Inbred :</u>
A/Strong	Hauschka	F91+3+5
C3H/Strong	Hauschka	F75+4+7
C57BL	Hauschka	F?+4+4
DBA/Little	Hauschka	F?+4+5
C57L	Jax	F53+3

Temporarily maintained :

AK/a	Bichel	F69+2
------	--------	-------

Mutant stocks. None.

Recent publications :-

Klein,G. Comparative studies of mouse tumors with respect to their capacity for growth as "ascites tumors" and their average nucleic acid content per cell. Exp. Cell Res. 2:518,1951.

Klein,G. The production of ascites tumors in mice and their use in studies on some biological and chemical characteristics of neoplastic cells. Uppsala 1951.

Klein,G., Klein,E., and Klein, E. Cancer Research 12:484,1952.

Leuchtenberger,C., Klein,G., and Klein,E. Cancer Research, 12:480,1952.

Klein,G. The nature of mammalian lymphosarcoma transmission by isolated chromatin fractions. Cancer Research, 12:589, 1952.

UNIVERSITY OF SYDNEY

Animal Genetics Section,
Commonwealth Scientific and Industrial Research Organisation
c/o Department of Zoology,
University of Sydney,
New South Wales,
Australia.

A.S. Fraser
M.H. Hardy

Dated: 25 Nov 52
Received: 4 Dec 52

Inbred lines.

A, CBA, C57BL, RIII. The following mutants are also being repeatedly backcrossed onto A-strain, to give isogenic sublines: Ca, fz, N, Re, hr, hr^{rh}, wa-1, wa-2, we.

Mutants.

Maintained in cross-bred stocks: cr, dw, pg, Ta.

Experimental stocks.

Os; selection experiment for positive-negative oestrogen sensitivity. Cs stock; selection experiment involving length of tibia to compare rates of progress of selection between lines progeny tested to inbred lines, and lines progeny tested to half sisters.

TORONTO

Department of Zoology,
University of Toronto,
Toronto, 5.,
Canada.

L. Butler.

Dated : 2 Dec 52
Received : 20 Dec 52

Stocks. No change.

Requests for the Mouse News Letter should be addressed to:-

The Director,
Laboratory Animals Bureau,
M.R.C. Laboratories,
Holly Hill,
Hampstead,
London, N.W.3.
England.

Items for contribution to the Mouse News Letter should be addressed to:-

Dr. T. C. Carter,
Institute of Animal Genetics,
West Mains Road,
Edinburgh 9,
Scotland.

The next Mouse News Letter, No. 9, will be dated July 1953; contributions should reach Edinburgh by 1 June 1953. It will be a consolidated number, like Nos. 1 and 5, giving lists of stock holdings in full.