

2022 RAT GENOME DATABASE CALENDAR



Rat Genome Database



"Milo the Science Rat." Photo courtesy of Sarah Hunt, MartyMouseHouse. <https://www.martymousehouse.com/>

**This calendar is dedicated to the rat research community worldwide.
Thank you for your continued support and encouragement!**

WITH APPRECIATION, THE RGD TEAM



JANUARY 2022

Sun	Mon	Tues	Wed	Thur	Fri	Sat
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

"Ready or not, here I come." (left) 4-month-old pet Heterogeneous stock rats Cheddar (back) and Hamilton (front) enjoy a game of hide and seek. Photo courtesy of Gina Giorgio, North Carolina, USA.

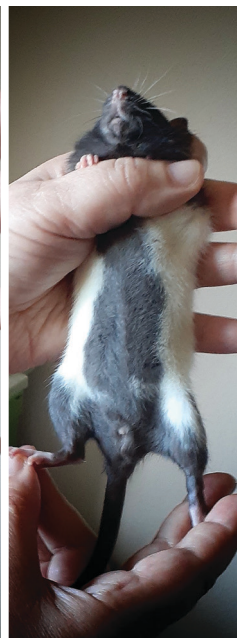
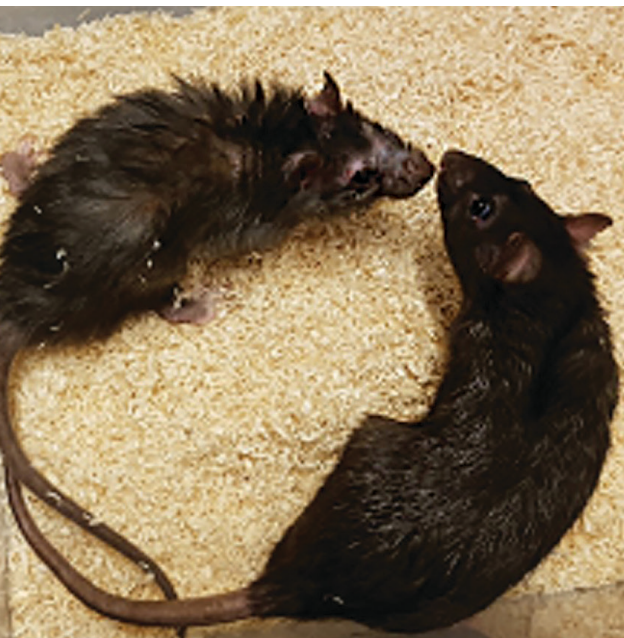
"Every family has that one kid." (right) Photo of rats from the Humane Animal Welfare Society fostered by the family of RGD Bioinformatics Manager, Jeff De Pons. Photo courtesy of Jeff De Pons, Rat Genome Database, Medical College of Wisconsin, Milwaukee, WI, USA. <https://rgd.mcw.edu>



FEBRUARY 2022

Sun	Mon	Tues	Wed	Thur	Fri	Sat
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27	28					

"The loving rat." Original drawing by Siri Johnada. Used with permission of the artist. Submitted by her mother, RGD developer, Jyothi Thota, Rat Genome Database, Medical College of Wisconsin, Milwaukee, WI, USA. <https://rgd.mcu.edu>



MARCH 2022

Sun	Mon	Tues	Wed	Thur	Fri	Sat
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Left: The effects of a *de novo* mutation in the *Tuft1* gene in the BXH6 RI strain and a wild type BXH6 rat (BXH6/Cub, RGD:2307136). The mutation is associated with abnormal coat appearance. Photo courtesy of Dr. Michal Pravenec, Institute of Physiology (IPHYS) of the Czech Academy of Sciences (CAS). <https://www.fgu.cas.cz/en/departments/laboratory-of-genetics-of-model-diseases>

Right: "Downunder whiteside". Downunder is a dominant mutation that results in a ventral pattern that tends to mirror the dorsal pattern. The whiteside mutation is the reason that this ratty girl has "pants". Rats bred by and photos courtesy of Concepcion Perez, University of California, Berkeley, CA, USA.



APRIL 2022

Sun	Mon	Tues	Wed	Thur	Fri	Sat
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24	25	26	27	28	29	30

Three week old Kwl:Wistar rats (RGD:150520162).
Photography by Mr. Takao Nakagawa, Kiwa Laboratory
Animals Co., Ltd., Wakayama, Japan. Photos submitted by
Dr. Masayuki Anzai, Institute of Advanced Technology, Kindai
University, Kainan City, Wakayama, Japan.
<https://www.kwl-a.co.jp>
[https://www.kindai.ac.jp/bost/about/
advanced-technology/](https://www.kindai.ac.jp/bost/about/advanced-technology/)



MAY 2022

Sun	Mon	Tues	Wed	Thur	Fri	Sat
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29	30	31				

"Miss Squish" (left), "Bae, Suzie, & Mika" (top right) and "Winnifred" (bottom right). Original paintings by Drusilla Kehl, The Illustrated Rat. Used with permission of the artist. <https://www.theillustratedrat.com/>



JUNE 2022

Sun	Mon	Tues	Wed	Thur	Fri	Sat
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26	27	28	29	30		

"Decorating the world via genome editing."
Genome-edited Sprague-Dawley (white) rats.
Photo courtesy of Hsiao-hui Chang and caption by
Dr. Jason Sung of the National Laboratory Animal Center
of NARLabs, Taiwan. <https://www.nlac.narl.org.tw/>





JULY 2022

Sun	Mon	Tues	Wed	Thur	Fri	Sat
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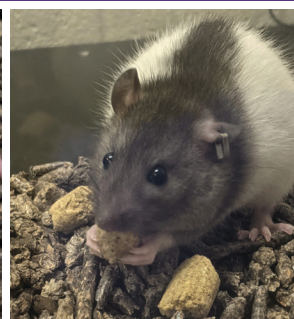
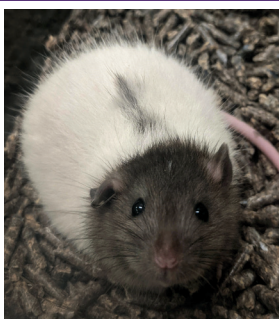
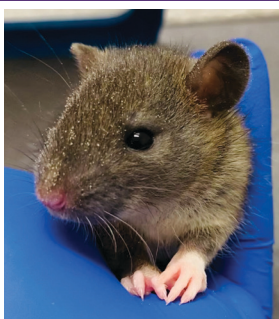
Sadie, originally a wild rat living under Dr. Kevin Grazier's porch in New York, became the best of indoor pals. Sadie lived to an astounding 5½ years old! Photos courtesy of Dr. Kevin Grazier. <https://www.imdb.com/name/nm0337207/>



AUGUST 2022

Sun	Mon	Tues	Wed	Thur	Fri	Sat
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"Packed Rat." Chimeric rat generated by injection of DA/Slc X BN/SsNslc embryonic stem (ES) cells into a Crj:WI blastocyst (RGD IDs 61111, 1302631 and 2312504, respectively). Photo courtesy of Dr. Masumi Hirabayashi, Section of Mammalian Transgenesis, Center for Genetic Analysis of Behavior, National Institute for Physiological Sciences, Okazaki, Aichi, Japan.
<https://www.nips.ac.jp/eng/research/group/post-18/>



SEPTEMBER 2022

Sun	Mon	Tues	Wed	Thur	Fri	Sat
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Top left (two photos): BDIX.BDIV-Mss1c/Zte congenic rat strain (BDIX.BDIV-Mss1c; BDIX.BDIV-82.9-105.2 Mb/lfz AKA / Zte, RRRC# 00904, RGD:150520183). Top right (two photos): Hsd:ZUC-Lepr^{fla} (HsdHlr:ZUCKER-Lepr^{fla}, RGD:150520161). Bottom: LE_{ROSA26em1}(CAG-tGTomato)^{flac} rats (RRRC# 00938, RGD:150520182) photographed through a 581 nm filter are glowing red from my head “to-ma-toes” (left) and enjoying an eponymous treat (right). *tdTomato* is excited optimally at 554 nm and emits light at 581 nm. Photos courtesy of Alexandra DeWitt, Rat Resource & Research Center, University of Missouri, Columbia, MO, USA. <https://www.rrrc.us/>



OCTOBER 2022

Sun	Mon	Tues	Wed	Thur	Fri	Sat
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23	24	25	26	27	28	29
30	31					

"Tricks and treats." Snowy (left), 2½ year old hairless Dwight (top right) and Michael (bottom right) are ready to celebrate Halloween. Photos courtesy of Dr. April Wittenburg and Kaitlynn Barth, Brook-falls Veterinary Hospital & Exotic Care Inc. Menomonee Falls, WI, USA. <https://www.brookfallsveterinary.com/>



NOVEMBER 2022

Sun	Mon	Tues	Wed	Thur	Fri	Sat
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27	28	29	30			

Nickels is ready to give thanks in a stylish turkey hat! Photo courtesy of Sarah Hunt, MartyMouseHouse.
<https://www.martymousehouse.com>



DECEMBER 2022

Sun	Mon	Tues	Wed	Thur	Fri	Sat
				1	2	3
4	5	6	7	8	9	10
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18	19	20	21	22	23	24
25	26	27	28	29	30	31

This Heterogeneous stock (NMcwiWfsm:HS, RGD:13673907) rat is 5½ weeks old and is the friendliest, most photogenic boy, hopping to be spoiled over the winter holidays. HS rats are a result of 90+ generations of outbred rats that come from 8 original inbred strains. The Solberg Woods lab works with HS rats to study metabolism, obesity, type 2 diabetes and behavioral traits with an end goal to genetically map out metabolic traits. Photos courtesy of TrangDai Bui of the Solberg Woods Lab at Atrium Health Wake Forest Baptist, Winston-Salem, NC, USA. <https://school.wakehealth.edu/Research/Labs/Woods-Lab>

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Co-Investigator

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Bioinformatics Manager

- Jeff De Pons, BSc

Database Administrator

- Stacy Zacher, MSc

Systems Administrator

- Kent Brodie, MSMI



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- Tom Hayman, PhD
- Shur-Jen Wang, PhD
- Monika Tutaj, PhD
- Matt Hoffman, BSc
- Mary Kaldunski, BSc, rLATg
- Mahima Vedi, PhD
- Morgan Hill, MMP
- Wendy Demos, MSc

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- Jyothi Thota, MSc
- Harika Nalabolu, MSc
- Logan Lamers, BA
- Adam Gibson, BSc
- Ketaki Thorat, BCE, OCJP6

*“When you ask...
Do you want to go for a ride?”*

Joey (left), a 16-year-old Pointer-Boxer mix and Raj (right), an about 10-year-old Pointer-Weimaraner mix. Photo courtesy of Dr. Anne Kwitek, Rat Genome Database, Medical College of Wisconsin, Milwaukee, WI, USA.
<https://rgd.mcw.edu>

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Cover Collage

Left:

"Holiday HS Rat." Photo courtesy of TrangDai Bui of the Solberg Woods Lab at Atrium Health Wake Forest Baptist, Winston-Salem, NC, USA.

Top center:

"Nickels in the Baff." Photo courtesy of Sarah Hunt, MartyMouseHouse.

Bottom center:

"Whiteside Heart." Photo of whiteside rats courtesy of Concepcion Perez, University of California, Berkeley, CA, USA.

Top right:

"Dwight." Photo courtesy of Kaitlyne Barth, Brook-falls Veterinary Hospital & Exotic Care Inc. Menomonee Falls, WI, USA.

Bottom right:

"Hamilton...the rat, not the musical." Photo courtesy of Gina Giorgio, North Carolina, USA.

Vincent (below)

"Vincent." Original painting by Drusilla Kehl, The Illustrated Rat. Used with permission of the artist.

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