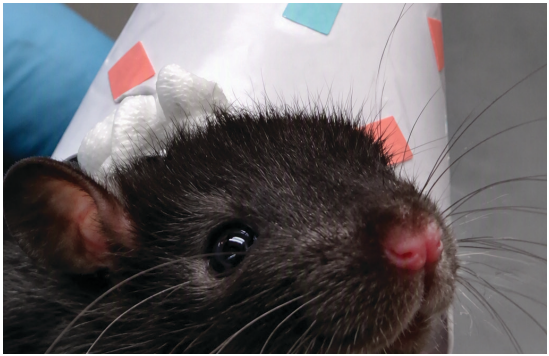
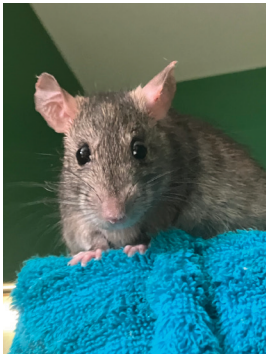
2027













RAT GENOME DATABASE CALENDAR



Adam's Band. Original artwork courtesy of Drusilla Kehl, The Illustrated Rat. Used with permission of the artist.
https://www.theillustratedrat.com/

This calendar is dedicated to the rat research community, our non-rat model organism supporters, and the scientists who dedicate themselves to a broader understanding of our world. Thank you for your continued support, collaboration and encouragement – YOU ROCK!

— WITH APPRECIATION, THE RGD TEAM








JANUARY 2027

Sun	Mon	Tues	Wed	Thur	Fri	Sat
					1	2
3	4	5	6	7	8	9
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17	18	19	20	21	22	23
24/31	25	26	27	28	29	30

Top left: *HS East.* Huddled rat pups from the "HS East" Heterogeneous Stock (HS) rat colony (NMcwiWfsm:HS, RRID:RGD_13673907). Photographed by Angela Beeson, edited by Oksana Polesskaya, PhD, submitted by Leah Solberg Woods, PhD, Wake Forest University School of Medicine, Winston-Salem, NC, USA. **https://school.wakehealth.edu/research/labs/woods-lab/**

Top (Center, Right) and Bottom: *HS West.* Heterogeneous Stock (HS) rats from the "HS West" colony (McwiWfsmAap:HS, RRID:RGD_155269102). HS rats have been outbred from eight inbred rat strains and maintained in a manner that minimizes inbreeding since 1984, enabling high-resolution genetic mapping. The colony is maintained by the Center for Genetics, Genomics, and Epigenetics of Substance Use Disorders in Outbred Rats, which is funded by NIDA until 2029 (P30DA060810). Photographed by Nina Suzuki and edited by Oksana Polesskaya, PhD, University of California San Diego, La Jolla, CA, USA. **https://www.ratgenes.org/**





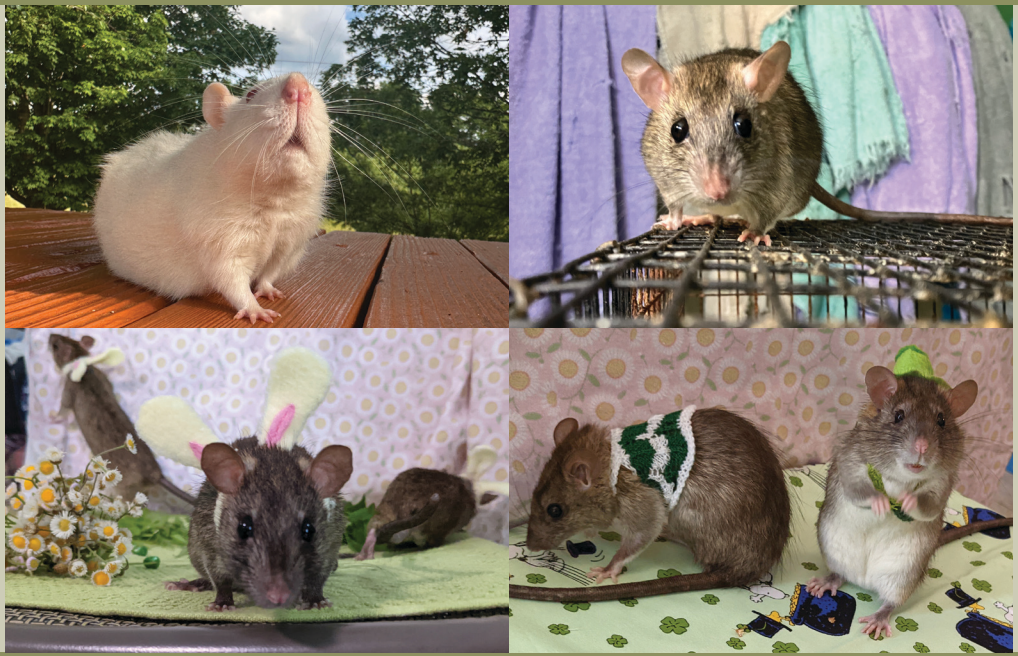


FEBRUARY 2027

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Left: *Cupid's got nothing on these little heartthrobs!* Agouti-coated *Rattus rattus* (Top) and a blonde *R. Rattus* offspring of black-coated dam and agouti-coated sire (Bottom). The light coat phenotype is caused by a recessive *Rab38* gene variation associated with abnormal coat/hair pigmentation (MP:0002075). Photos courtesy of Brian Starr. **https://blonderoofrat.com/**

Right: *How Sweet the Moonlight.* Original artwork inspired by a Jocelyn Pook piece used in the film "The Merchant of Venice", courtesy of Drusilla Kehl, The Illustrated Rat. Used with permission of the artist. **https://www.theillustratedrat.com/**

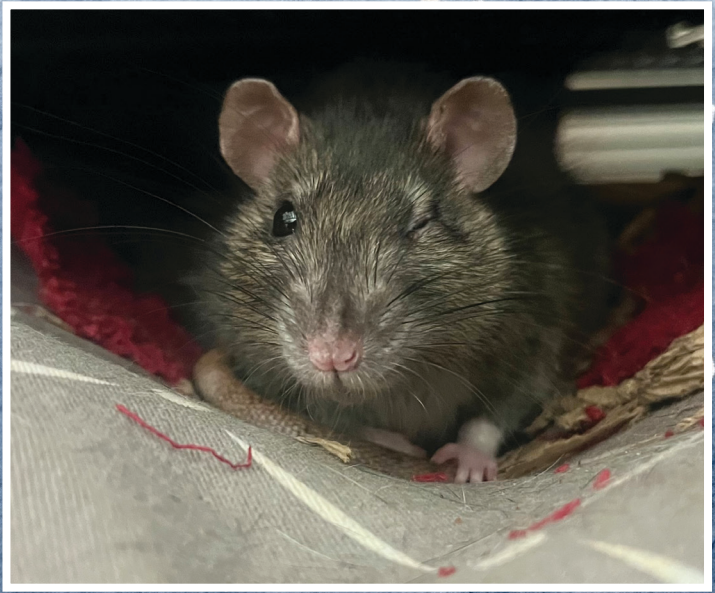


MARCH 2027

Sun	Mon	Tues	Wed	Thur	Fri	Sat
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Top: *Spring is in the air. Rattus rattus* Hamilton basks outside on a beautiful sunny day (Left) while Rhatt Butler tackles some spring cleaning (Right). Photos courtesy of Kevin R. Grazier, PhD. **https://www.imdb.com/name/nm0337207/**

Bottom: *Blooming flowers, bunny ears, and leprechaun magic - these rats bring the sweetest springtime cheer!* Male agouti-coated *Rattus rattus* (Left) channels his inner Peter Rabbit to welcome in the spring season. A female (Left) and male (Right) agouti-coated *R. rattus* look for luck in their festive green attire. Photos courtesy of Brian Starr. **https://blonderoofrat.com/**







APRIL 2027

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Happy World Rat Day!

Left: *Wink, wink...don't forget the extra treats because April 4th is all about ME!* Buzz, a brown Heterogeneous Stock (HS) rat (NMcwiWfsm:HS, RRID:RGD_13673907), does a little self-promoting to celebrate World Rat Day. Photo courtesy of Gina Giorgio.

Top right: *Did someone say cake???* Photo of Sherman courtesy of Kevin R. Grazier, PhD. **https://www.imdb.com/name/nm0337207/**

Bottom right: *The View from the Tardis.* Original artwork courtesy of Drusilla Kehl, The Illustrated Rat. Used with permission of the artist. **https://www.theillustratedrat.com/**





MAY 2027

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Left: *If my whiskers fit, I sit.* No corner too cozy, and no snack too well hidden. My whiskers have already approved this location. Dahl Salt-Sensitive rat (SS/JrTol, RRID:RGD_724573) housed at the University of Toledo College of Medicine and Life Sciences, Toledo, OH, USA. Photo courtesy of Oluwatosin Akinola, 4th year PhD candidate, Biomedical Sciences. Reference: PMID: 363301488.

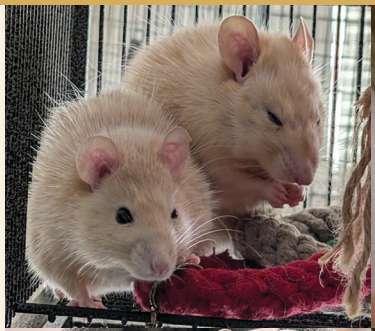
Right: *Cozy time.* Six-week-old Dahl Salt-Sensitive rat (SS/JrTol, RRID:RGD_724573). Photo courtesy of Wisdom Ahlidja, PhD Candidate, University of Toledo, College of Medicine and Life Sciences, Toledo, OH, USA. **https://www.utoledo.edu/med/depts/physpharm/hypertension_center/**

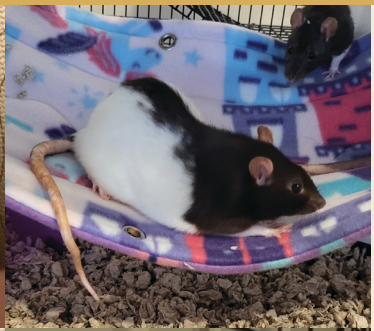


JUNE 2027

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Champions of Discovery: Just as every World Cup victory is built on teamwork, dedication, and strategy, scientific discovery is achieved through collaboration across researchers, institutions, and disciplines. Every experiment, every dataset, and every shared resource brings us one step closer to understanding biology and improving human health. Original artwork courtesy of Sachin Aryal, PhD, Rashkind Scholar, T-32 Postdoctoral Fellow at the Children's Hospital of Philadelphia, Philadelphia, PA, USA. **https://www.chop.edu/**








JULY 2027

Sun	Mon	Tues	Wed	Thur	Fri	Sat
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Who let the rats out?

Top left: *Two tails, one mission: Getting out together!* This pair of male rats, carrying the recessive *Rab38*$^{-/-}$ gene variation, plot their great escape. Photo courtesy of Brian Starr. **https://blonderoofrat.com/**

Top Center: *Free to roam...and free to snuggle.* Buzz, a brown Heterogeneous Stock (HS) rat (NMcwiWfsm:HS, RRID:RGD_13673907) cozies up on the couch. Photo courtesy of Gina Giorgio.

Top Right: *Hammock inspection team.* Black and white hooded rats Elliot (front, 3 years old) and Zelda (rear, 8 months old) check out their fall breaker for compliance with strict comfiness protocols. Photo courtesy of Sue Dewey.

Bottom images: *The rats went out of their enclosures... to see what they could see!* Linguini (Left), Rhatt Butler (Center), and Scarlett (Right) explore in, out, and around their enclosures. Photos courtesy of Kevin R. Grazier, PhD. **https://www.imdb.com/name/nm0337207/**



AUGUST 2027

Sun	Mon	Tues	Wed	Thur	Fri	Sat
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Honoring the ultimate rodent remix. Original artwork of Heterogeneous Stock (HS) rats inspired by RATTACA (**https://ratgenes.org/rattaca/**), Abraham Palmer, PhD's rat-themed remix of the iconic GATTACA movie poster. Digitally created with Procreate software by Samantha Treadway, Research Assistant in the lab of Paul Meyer, Department of Psychology, University at Buffalo, Buffalo, NY, USA. Used with permission of the artist. **https://meyerlabscience.org/**



SEPTEMBER 2027

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No tail, no problem! The short-tail phenotype (MP:0000592) is associated with mutations in the *TBXT* gene in canines, while evidence in rats suggests an association with the *Prkg2* gene. Bonnie, pictured here, was born naturally with this phenotype and not selectively bred for it. Instead, her tail morphology arose spontaneously. Photos courtesy of Molly Darling, Darling Rats. **https://www.darlingrats.com/#/**







OCTOBER 2027

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24/31	25	26	27	28	29	30

Left: *A little Halloween magic.* These rats are ready for tricks, treats, and festive costumes! (Top) Frankie (2.5-year-old Black Berkshire) and Luke (2-year-old Tan Rex) as angels and (Bottom) Darrell (1.5-year-old Super Curly Rex) and Elliott (3-year-old Black and White Hooded) as vampires for Halloween. Photos courtesy of Sue Dewey.

Right: *Color, genes, and curious eyes.* A wild-type agouti adult male (right), dark blonde young female (purple sweater) and light blonde young male (orange sweater), both carrying a PCR-verified *Rab38* deletion. In this colony, lighter blonde animals are often observed to display narrow eye opening (MP:0005287), whereas darker animals tend to hold their eyes more widely open. At present, this is an observational finding, and the genetic basis remains unknown. Rats bred by and photo courtesy of Brian Starr. **https://blonderoofrat.com/**



NOVEMBER 2027

Sun	Mon	Tues	Wed	Thur	Fri	Sat
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Ratsy's Father. Original artwork inspired by Whistler's Mother (James McNeill Whistler). Image created by retired RGD artist "Ratsy", Rat Genome Database, Medical College of Wisconsin, Milwaukee, WI, USA. Used with permission of the artist. **https://rgd.mcw.edu/**







DECEMBER 2027

Sun	Mon	Tues	Wed	Thur	Fri	Sat
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12	13	14	15	16	17	18
19	20	21	22	23	24	25
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Left: *The Nutcracker didn't stand a chance.* Meet Fish, the Rat King. Fish strikes a regal pose and is ready to spread holiday cheer. Image courtesy of Sarah Hunt, Marty Mouse House. Used with permission of the artist. **https://www.martymousehouse.com/**

Middle: *Not a creature was stirring...except this one.* A Heterogeneous Stock (HS) rat from the "HS West" colony (McwiWfsmAap:HS, RRID:RGD_155269102) stands up to see what all the holiday fuss is about. Photographed by Nina Suzuki and edited by Oksana Polesskaya, PhD, University of California San Diego, La Jolla, CA, USA. **https://ratgenes.org/**

Right: *Deck the Halls with Disco Balls!* Baxter lends a paw decorating for the holidays. Image courtesy of Sarah Hunt, Marty Mouse House. Used with permission of the artist. **https://www.martymousehouse.com/**

RAT GENOME DATABASE

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Co-Investigator
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- Missy Eilbes, PhD
- Mary Kaldunski, BSc, RLATG
- Carissa Park, MSc
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- Renuka Vepachedu, MSc
- Shur-Jen Wang, PhD

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Systems Administrators
- Kent Brodie, MSMI
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- Steven White

Developers
- Adam Gibson, BSc
- Varun Reddy Gollapally, MSc
- Logan Lamers, BA
- Jyothi Thota, MSc
- Marek Tutaj, MSc



Please continue to support RGD by citing our work and visiting our website at https://rgd.mcw.edu/.

Rat Genome Database

The Fine Art of Biocuration: In June 2026, RGD Research Scientist Stan Laulederkind, PhD retired after almost 20 years on the team. This shadow box celebrates Stan's years of creativity, featuring some of the art he contributed to RGD along with a few memorable "Stan-isms". Shadow box and photos courtesy of RGD curator, Missy Eilbes, PhD, Rat Genome Database, Medical College of Wisconsin, Milwaukee, WI, USA. Used with permission of the artist.

Calendar printing: Heritage Printing, Brookfield, WI, USA. | https://www.clickheritage.com

Additional design: Phil Friso, Cultivate Communications, Brookfield, WI, USA.
https://www.cultivate-communications.com

Cover Photos

Top left: *Jackie, the ballerina.* Jackie is an 8-year-old cattle dog mix ready to dance the night away. Did you know *Canis lupus familiaris* is one of the 11 species supported by RGD? Check it out here: **https://rgd.mcw.edu/wg/species/dog/**. Photo courtesy of Sue Dewey.

Top middle: *Let's Celebrate! I brought the confetti.* This Heterogeneous Stock (HS) rat (NMcwiWfsm:HS, RRID:RGD_13673907) is ready to welcome in the New Year. Photo courtesy of Angela Beeson, edited by Oksana Polesskaya, PhD and submitted by Leah Solberg Woods, PhD, Wake Forest University School of Medicine, Winston-Salem, NC, USA.
https://school.wakehealth.edu/research/labs/woods-lab/

Top right: Scarlett has a great view from her perch, and she may look familiar. This curious face also represents *Rattus rattus* on the RGD website! Visit the Black Rat Species Page here: **https://rgd.mcw.edu/wg/blackrat/**. Photo courtesy of Kevin R. Grazier, PhD.
https://www.imdb.com/name/nm0337207/

Bottom left: *Mer-Rats.* Original artwork courtesy of Drusilla Kehl, The Illustrated Rat. Used with permission of the artist. **https://www.theillustratedrat.com/**

Bottom middle: *A tail fit for a black and white affair.* This *Rattus rattus* is always dressed to impress! This male rat, bred by Brian Starr for its tame nature, has an unusually long and clean white tail tip. Photo courtesy of Brian Starr.
https://blonderoofrat.com/open-research-questions/#hyp-genetic-white-tail-tip/

Bottom right: *Move over, I'm hungry!* 2-week-old pigs jostle for a meal at the Minnesota State Fair. Did you know *Sus scrofa* is one of the 11 species supported by RGD? See the portal here: **https://rgd.mcw.edu/wg/species/pig/**. Photo courtesy of RGD curator, Wendy Demos, Rat Genome Database, Medical College of Wisconsin, Milwaukee, WI, USA.
https://rgd.mcw.edu/





Reuben reminds us that curiosity, kindness, and a little mischief can leave a lasting legacy.

A recurring star of the 2024-2026 RGD Desktop Calendars, he appeared each year in a science-themed image, bringing joy to our community. Reuben lived a remarkable 3 years and 5 months. We are grateful to Sarah Hunt of Marty Mouse House for sharing him with us through photographs and allowing him to be part of the RGD calendar tradition. Images courtesy of Sarah Hunt, Marty Mouse House. Used with permission of the artist.
https://www.martymousehouse.com/