



2018 Rat Genome Database Calendar

Ode to a Curator

Daughter of Romania

*Fingers crashing on piano keys,
weaving rapturous concertos*

*Fingers crashing on a keyboard,
depicting intricate biochemical pathways*

Generous, joyous, kind, brilliant lady

*The Friday Treats Faerie, in her
brightly colored stockings*

*Now flits fore'ermore 'twixt
Avalon and Valinor.*

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

This year's calendar is also dedicated to the late Dr. Victoria Petri — a valued member of the RGD family, gone too soon. We sorely miss Victoria's joyful and playful spirit, her kind and generous heart and her passion for science.

With appreciation,
The RGD Team



"Indie and the Pillars of Creation". Original painting in watercolors by Drusilla Kehl, The Illustrated Rat. Used with permission of the artist.

<http://www.illustratedrat.macwebsitebuilder.com>

"Ode to a Curator", by Dr. G. Thomas Hayman, Rat Genome Database, Medical College of Wisconsin, Milwaukee, WI, USA. Used with permission.



January 2018

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			

Three photos of a single male Patchwork rat. The Patchwork phenotype stems from a recessive gene mutation that results in stark patterns of transient hair growth which appear to migrate from month to month. The mutation has been seen in Wisconsin and Florida in the USA, and in the Netherlands. Photos courtesy of Mike Bowers and Joanne Bella Hodges, Senior Team Member, The Rat Guide.

<http://ratguide.com>



February 2018

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			

Three-week-old albino Kwl:Wistar rats with assorted persimmons. 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.

<http://www.kwl-a.co.jp>

<http://www.waka.kindai.ac.jp/tea/sentan/index.html>



March 2018

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

Thirteen-lined ground squirrels in their active state (left) and torpid, or hibernating, state (right). RGD now presents data for additional mammalian species, including the squirrel (*Citellomys tridecemlineatus*). Photos courtesy of Dr. Sandy Martin, The Program in Molecular Biology, University of Colorado, Denver, CO, USA.

<http://www.ucdenver.edu/academics/colleges/medicalschoo/programs/molbio/faculty/martins/Pages/MartinS.aspx>

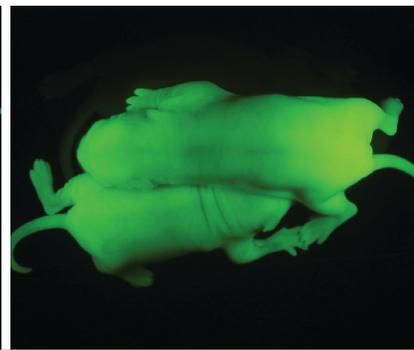
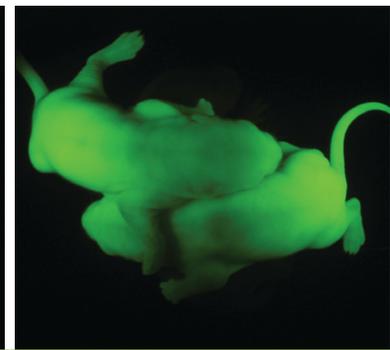
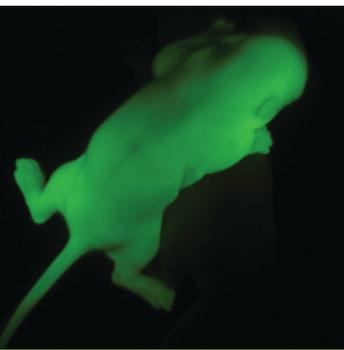
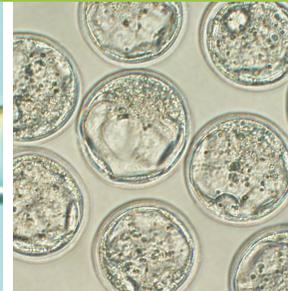
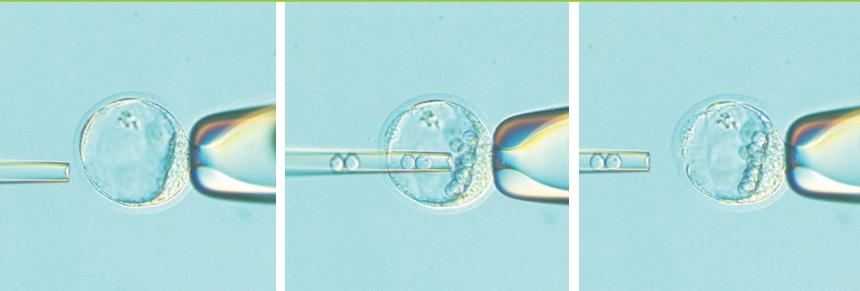


April 2018

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					

One adult and two juvenile Marten rats. Marten rats, aka "Red-Eyed Devils", are born with black fur and red eyes, but as they age the coat color fades/lightens, as seen here. The Marten mutation originated in the Netherlands and has been exported to the UK and the USA. Photo courtesy of René Bastiaans, the Netherlands.

<http://www.allesoverratten.nl/>



May 2018

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
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27	28	29	30	31		

Top row: Rat ES cells being injected into DAXBN cryopreserved blastocysts for generation of rat chimeras. Bottom: Germline-transmitted pups from chimeric rats, showing expression of green fluorescent protein. Photos courtesy of Dr. Tomo Etoh, Central Institute for Experimental Animals (CIEA), Kawasaki, Japan.

<http://www.ciea.or.jp/en/rinen.html>



June 2018

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

Whiteside, Blazed and Down Under rat pups. The whiteside coat color mutation has been observed since the 1980s. Appearance is similar to a "hooded rat with pants" or a banded coat with the spinal stripe of a hooded rat. Full color extends down the hind legs, including the hind toes, and the full length of the tail. Also seen with other known spotting mutations such as "blazed" (white face blaze) or "down under" (Australian mutation that adds ventral color, sometimes small spotting). Rats raised by and photos courtesy of Concepcion Perez, University of California, Berkeley, CA, USA.

MILO'S TRANS-LUNAR INJECTSHIN PLAN FOR AWESOME SPACEFLIGHTS

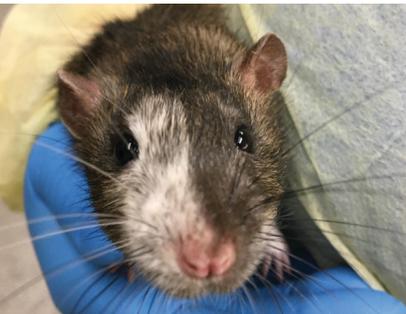


July 2018

Sun	Mon	Tues	Wed	Thur	Fri	Sat
1	2	3	4	5	6	7
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22	23	24	25	26	27	28
29	30	31				

"Milo", the science rat, lectures on his "Trans-lunar injectshin plan for awesome spaceflights". Photo courtesy of Sarah Hunt, MartyMouseHouse.com.

<http://www.martymousehouse.com/>



August 2018

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	

Top left and center, bottom left: Chimeric rats generated by injection of F344 ES cells into AC1xBN blastocysts. Top right: F344/NCrI Male. Bottom center and right: Three 4-week-old HXB10/lpcv rats. Photos courtesy of Dr. Akiko Takizawa, Genomic Sciences & Precision Medicine Center (GSPMC, formerly the Human & Molecular Genetics Center).

<https://www.mcw.edu/Human-and-Molecular-Genetics-Center-HMGC.htm>

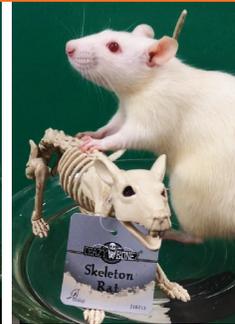


September 2018

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
23/30	24	25	26	27	28	29

"Little Ace", a black Berkshire rat. Photography by Val Tiley. Photo submitted by Joanne Bella Hodges, Senior Team Member, The Rat Guide.

<http://ratguide.com>



October 2018

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			

24-week-old CrjJ:WI rat with a skeletal friend. Photos courtesy of Dr. Masumi Hirabayashi, Section of Mammalian Transgenesis, Center for Genetic Analysis of Behavior, National Institute for Physiological Sciences, Okazaki Aichi, Japan.

<http://www.nips.ac.jp/mamtg/>



November 2018

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	

Mutant Sprague Dawley rat. Photo courtesy of Dr. Shauna A. Rasmussen and Ms. Martine B. Williams, Fridovich-Keil Lab, Department of Human Genetics, Emory University School of Medicine, Atlanta, GA, USA.

<http://genetics.emory.edu/index.html>



December 2018

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					

"Trent", a male Russian Blue Dumbo rat. Photo courtesy of Joanne Bella Hodges, Senior Team Member, The Rat Guide.

<http://ratguide.com>

RGD now presents data for additional mammalian species, including dog (*Canis lupus familiaris*).

RGD's Dogs



Column 1: top to bottom: Dexter, a mixed breed with some Cavalier King Charles Spaniel (Mary Shimoyama), Fluffy, German Shepherd Dog (Jennifer Smith), Bella, Golden Retriever (Mindy Dwinell). **Column 2:** top to bottom: Lilly Rose, Yellow Labrador Retriever (Stacy Zacher), Chewie and Jaxon, Chewie (left), Toy Poodle/Chinese Crested Hairless mix, Jaxon (right), mixed breed with Standard Poodle and Hound (Liz Bolton), Farah and Duncan, Golden Retrievers (Tom Hayman)

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Cover Photos

Top row, left to right:

Mutant Sprague Dawley rats. Photo courtesy of Dr. Shauna A. Rasmussen and Ms. Martine B. Williams, Fridovich-Keil Lab, Department of Human Genetics, Emory University School of Medicine, Atlanta, GA, USA.

“Trixie & Brooke”. Original painting in gouache (opaque watercolor) by Drusilla Kehl, The Illustrated Rat. Used with permission of the artist.

Three-week-old albino Kwl:Wistar rats with assorted persimmons. 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.

“Jetta”, a Russian Blue Dumbo female with recessive blazing. Photo courtesy of Joanne Bella Hodges, Senior Team Member, The Rat Guide.

Second row, left to right:

Three-week-old rat chimera generated by injecting FHH/EurMcwi ES cells into Crl:SD embryos. Photo courtesy of Dr. Akiko Takizawa, Genomic Sciences & Precision Medicine Center (GSPMC), Medical College of Wisconsin, Milwaukee, WI, USA.

Patchwork rat. The Patchwork phenotype stems from a recessive gene mutation that results in stark patterns of transient hair growth which appear to migrate from month to month. Photo courtesy of Dan Kohn and Joanne Bella Hodges, Senior Team Member, The Rat Guide.

Hibernating (torpid) thirteen-lined ground squirrel. Photo courtesy of Dr. Sandy Martin, The Program in Molecular Biology, University of Colorado, Denver, CO, USA.

Bottom row, left to right:

“Fibbs”, the intrepid pirate rat, steers his ship through the rough ocean waters. Photo courtesy of Sarah Hunt, MartyMouseHouse.com.

Variegated litter with one American Mink pup. Photography by Val Tiley. Photo submitted by Joanne Bella Hodges, Senior Team Member, The Rat Guide.

Glam Rat “Sophie”, a year-old recessive hairless female with standard ears. Photo courtesy of Lorraine Morrow and Joanne Bella Hodges, Senior Team Member, The Rat Guide.

Photo at right

“Panchetta”, a Russian Blue Rex Dumbo. Photo courtesy of Joanne Bella Hodges, Senior Team Member, The Rat Guide.

