

2019

Rat Genome  
Database  
Calendar

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

WITH APPRECIATION,  
THE RGD TEAM



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

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



# January 2019

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		

"Winter is...Here!". Original painting by Drusilla Kehl, The Illustrated Rat. Used with permission of the artist.

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





# March 2019

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
24/31	25	26	27	28	29	30

"Baby Augie" plays leprechaun, guarding his pot of gold to commemorate St. Patrick's Day. Photo courtesy of Sarah Hunt, MartyMouseHouse.com.

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



# April 2019

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				

Three-week-old albino Kwl:Wistar rat playing with blocks. 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>

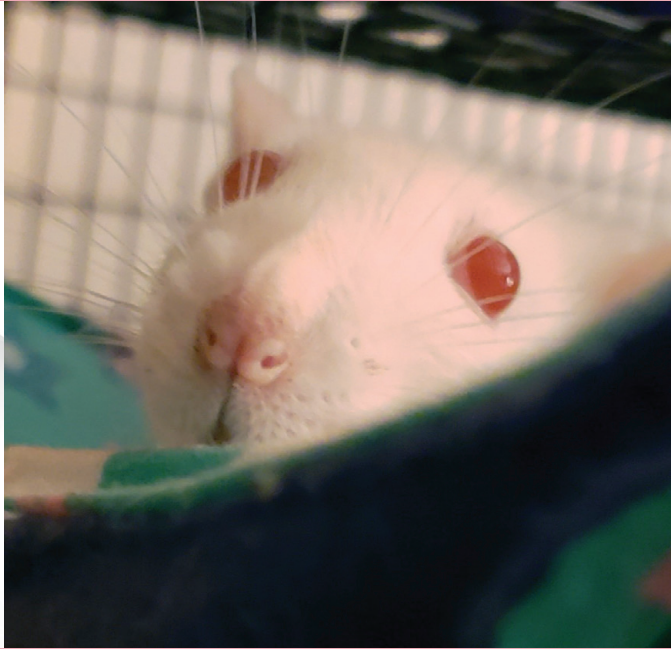


# May 2019

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	

"Mom is Busy!" and "The Thinker". Photos 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/mamtg/>



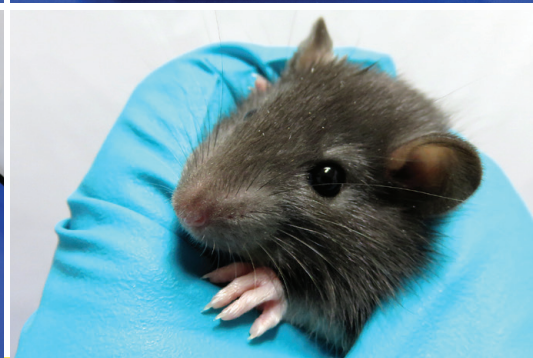
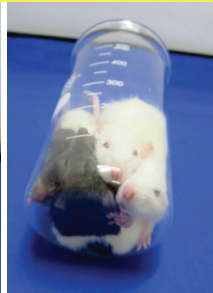
# June 2019

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

Six-month-old female Sprague-Dawley rat. Photo by Dr. Carmen J. Booth, DVM, Section of Comparative Medicine, Yale School of Medicine, New Haven, CT, USA.

[https://www.medicine.yale.edu/people/search/carmen\\_booth.profile](https://www.medicine.yale.edu/people/search/carmen_booth.profile)





# July 2019

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			

Long Evans (black hooded) and Wistar (white) rats derived from two-cell stage embryos vitrified using P10 and PEPeS (PMID: 26017290). Rats cryopreserved and redelivered by, and photos courtesy of, Dr. Tomoo Etoh, Reproductive Engineering Laboratory, Central Institute for Experimental Animals, Kawasaki City, Japan.

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



# August 2019

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

Rex, French Siamese and Tonkinese (Texas Siamese) pups. Upper left: litter of 8 male Rex, French Siamese and Tonkinese pups. Upper right: white faced Tonkinese male. Lower left: white faced Tonkinese male. Lower right: two Tonkinese females with headspot and messy blaze. Rats raised by and photos courtesy of Concepcion Perez, University of California, Berkeley, CA, USA.

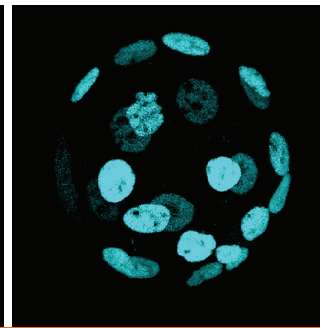
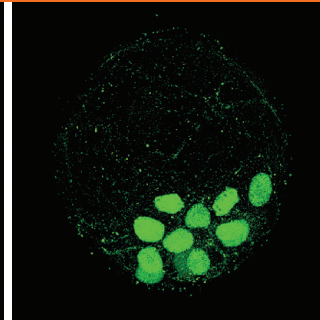
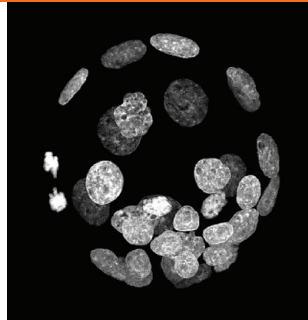
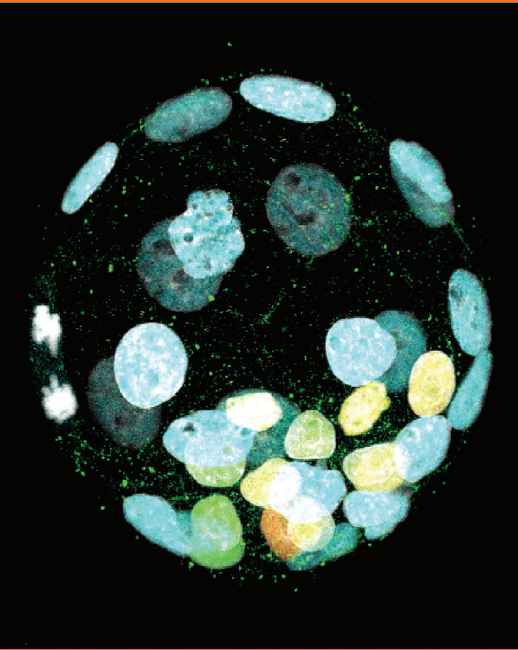


# September 2019

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					

"Hibernation". A live, torpid (hibernating) 13-lined ground squirrel, original photograph by Dr. Matt Andrews' laboratory, University of Minnesota, Duluth, MN. Artwork by Dr. Jingxing Ou, National Eye Institute, Bethesda, MD. Squirrel raised and photo submitted by Dr. Dana Merriman, Medical College of Wisconsin and University of Wisconsin-Oshkosh, Oshkosh, WI, USA.

[https://www.cell.com/cell/fulltext/S0092-8674\(18\)30290-3](https://www.cell.com/cell/fulltext/S0092-8674(18)30290-3)



# October 2019

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		

E4.5 Crj:Wistar (RGD: 2312504) rat blastocyst immunostained with anti-SOX2 (green), anti-SOX17 (red) and anti-CDX2 (blue) antibodies. Photos courtesy of Dr. Toshihiro Kobayashi and 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 2019

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

"Young Bonobo". Photo courtesy of Joel R. Miller, Milwaukee County Zoo, Milwaukee, WI, USA.

<https://www.milwaukeezoo.org/conservation/projects/apecardiovascular.php>



# December 2019

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				

"Rat-dolf". Russian Blue Dumbo. Rat bred by and photo courtesy of Joanne Bella Hodges, Senior Team Member, The Rat Guide.

<http://ratguide.com>



Jayla, a pregnant Russian Blue Siamese Dumbo and Sophie, a hairless female. Rats bred by and photos courtesy of Joanne Bella Hodges, Senior Team Member, The Rat Guide.

<http://ratguide.com>

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Calendar design: Phil Friso, Cultivate Communications, <https://www.cultivate-communications.com>

### **Principal Investigator**

- Mary Shimoyama, PhD

### **Co-Investigator**

- Mindy Dwinell, PhD

### **Research Scientists and Curators**

- Elizabeth Bolton, MSc, MB(ASCP)<sup>cm</sup>
- Tom Hayman, PhD
- Matt Hoffman, BSc
- Stan Laulederkind, PhD
- Jennifer Smith, MSc
- Shur-Jen Wang, PhD
- Monika Tutaj, PhD

### **Bioinformatics Manager**

- Jeff De Pons, BSc

### **Developers**

- Marek Tutaj, MSc
- Jyothi Thota, MSc

### **PhD Candidates**

- Gagatay Dursun, MSc

### **Database Administrator**

- Stacy Zacher, MSc

**Please continue to support  
RGD by visiting our website at  
<https://rgd.mcw.edu>.**

## Cover Photos

Top row, left to right:

“Marbles”. Three-week-old albino Kwl:Wistar rat playing with marbles and plush toys. 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.

“Burmese Pup”. Burmese four-week-old male. Rat bred by, and photo courtesy of Joanne Bella Hodges, Senior Team Member, The Rat Guide.

“Blastocyst”. E4.5 Crj:Wistar (RGD: 2312504) rat blastocyst immunostained with anti-SOX2 (green), anti-SOX17 (red) and anti-CDX2 (blue) antibodies. Photo courtesy of Dr. Toshihiro Kobayashi and Dr. Masumi Hirabayashi, Section of Mammalian Transgenesis, Center for Genetic Analysis of Behavior, National Institute for Physiological Sciences, Okazaki, Aichi, Japan.

Second row, left to right:

“Star the rat”. Photo courtesy of Keito Shimoyama, Milwaukee, WI, USA.

“American Gothic Hairless Rats”. Artwork by Joanne Bella Hodges, Senior Team Member, The Rat Guide.

“Best Buds”. Long Evans (black hooded) and Wistar (white) rats derived from two-cell stage embryos vitrified using P10 and PEPeS (PMID: 26017290). Rats cryopreserved and rederived, and photos courtesy of, Dr. Tomoo Etoh, Reproductive Engineering Laboratory, Central Institute for Experimental Animals, Kawasaki City, Japan.

Third row, left to right:

“Starry Night GS”. Original image, courtesy of Drs. Wei Li and Francisco Nadal-Nicolas, is of a live, torpid (hibernating) 13-lined ground squirrel at the UW-Oshkosh squirrel colony. Artwork by Dr. Jingxing Ou, National Eye Institute, Bethesda, MD 20892, USA.

“Bonobos—Mom and Baby”. Photo courtesy of Joel R. Miller, Milwaukee County Zoo, Milwaukee, WI, USA.

“Fuzzy Dog”. Original painting by Drusilla Kehl, The Illustrated Rat. Used with permission of the artist.

## Photo at right

“Pizza Rat”. Original painting by Drusilla Kehl, The Illustrated Rat. Used with permission of the artist.

