According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0579-0036. The time required to complete this information collection is estimated to average 2 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.							OMB APPROVED 0579-0036
This report is required by law (7 U.S.C. 2143). Failure to report according to the regulations can result and to be subject to penalties as provided for in Section 2150.					cease and desist	Interagency Report Control No. 0180-DOA-AN	Fiscal Year: 2018
UNITED STATES DEPARTMENT OF AGRICULTURE				REGISTRATION NUMBER: 93-R-0558			
ANIMAL AND PLANT HEALTH INSPECTION SERVICE				Customer Number: 330337			
ANNUAL REPORT OF RESEARCH FACILITY (TYPE OR PRINT)				2. HEADQUARTERS RESEARCH FACILITY (Name and Address, as registered with USDA, include ZIP Code) Novartis Institutes for Biomedical Research 5300 Chiron Way EMERYVILLE, CA 94608 Telephone: (510) 879-9794			
REPORT OF ANIMALS US	SED BY OR UNDER CONT	ROL OF RESEARCH FACILIT	Y (Attach additio	nal sheets if r	necessary or use APHI	S FORM 7023A.)	
A. Animals Covered By The Animal Welfare Regulations	B. Number of animals being bred, conditioned, or held for use in teaching, testing, experiments, research, or surgery but not yet used for such purposes.	C. Number of animals upon which teaching, research, experiments, or tests were conducted involving no pain, distress, or use of pain-relieving drugs.	D. Number of animals upon which experiments, teaching, research, surgery, or tests were conducted involving accompanying pain or distress to the animals and for which appropriate anesthetic, analgesic, or tranquilizing drugs were used.		experiments, researc conducted involving a to the animals and fo anesthetic, analgesic have adversely affect interpretation of the te experiments, surgery the procedures produ	, or tests. (An explanation of Icing pain or distress on these ons such drugs were not used	F. TOTAL NUMBER OF ANIMALS (Cols. C + D + E)
4 Dogs	0	0	0		0	. ,	0
5 Cats	0	0	0		0		0
6 Guinea Pigs	0	0	0		0		0
7 Hamsters	0	0	0		0		0
8 Rabbits	0	0	0		0		0
9 Non-Human Primates	0	0	0		0		0
10 Sheep	0	0	0		0		0
11 Pigs	0	0	0		0		0
12 Other Animals	0	0	0		0		0

## ASSURANCE STATEMENTS

1.) Professionally acceptable standards governing the care, treatment, and use of animals, including appropriate use of anesthetic, analgesic, and tranquilizing drugs, prior to, during, and following actual research, teaching, testing, surgery, or experimentation were followed by this research facility.

2.) Each principal investigator has considered alternatives to painful procedures.

3.) This facility is adhering to the standards and regulations under the Act, and it has required that exceptions to the standards and regulations be specified and explained by the principal investigator and approved by the Institutional Animal Care and Use Committee (IACUC). A summary of all such exceptions is attached to this annual report. In addition to identifying the IACUC approved exceptions, this summary includes a brief explanation of the exceptions, as well as the species and number of animals affected.

4.) The attending veterinarian for this research facility has appropriate authority to ensure the provisions of adequate veterinary care and to oversee the adequacy of other aspects of animal care and

use.		
(Chief Exec Institut	FICATION BY HEADQUARTERS RESEARCH FACILITY OFFICIAL utive Officer (C.E.O.) or Legally Responsible tional Official (I.O.)) I certify that the above is true, and complete (7 U.S.C. Section 2143).	
		DATE SIGNED
		07-NOV-2018