

2019 IACUC Checklist

For Laboratories Using Research Animals

Submit one completed checklist per Principal Investigator to the IACUC Office.

IACUC Office: Phone: 858-534-6069 (x46069) Mail Code: 0071 Email: iacuc@ucsd.edu

If you have any questions, please contact your Animal Welfare Specialist or the IACUC Office.

Please discuss this checklist with all lab members in preparation for the AAALAC site visit this fall.

Principal Investigator: _____

Name of person completing form: _____

Person's telephone # _____ Date completed: _____

PERSONNEL

YES	NO	All personnel who handle animals are listed on an approved protocol and an up-to-date Personnel Qualifications (PQ) form is on file for each person. [PPM 100.6]
YES	NO	All personnel know how to view the approved protocol.
YES	NO	All personnel are aware of the procedures listed on the approved protocol and understand that those are the <u>only</u> procedures that can be performed. [PPM 100.6]
YES	NO	All personnel have completed Orientation to Animal Research at UCSD and have taken the training classes appropriate for their responsibilities (e.g., surgery, breeding colony). Personnel know how to access their training records. [IACUC Policy 2]
YES	NO	All personnel have been thoroughly trained by qualified personnel in each procedure (surgery, anesthesia, aseptic technique, injection, blood collection, euthanasia, etc.). Training records are kept up-to-date. [IACUC Policy 2]
YES	NO	All personnel are enrolled in the Occupational Health Program. Risk assessment forms A & B are available on the EH&S web site. [Risk Assessment]
YES	NO	Laboratory personnel follow all applicable IACUC policies and all federal animal welfare regulations. [PPM 100.6]

PROTOCOL

YES	NO	All animal procedures, compounds and procedure locations are listed on an approved protocol. Even minor changes are approved by the IACUC before beginning work. [PPM 100.6]
YES	NO	The protocol clearly specifies the clinical signs of pain and distress that will be monitored, as well as methods of relieving pain including any drugs used, dosages, routes and frequency of administration, etc. [IACUC Policy 26]

GENERAL RECORD KEEPING

YES	NO	All animal records (surgery, anesthesia, post-op, breeding colony, food and water restriction, tumor monitoring, adjuvant, search results for alternatives, etc.) are maintained as described in the applicable IACUC policy and are kept for at least 3 years past the end date of the protocol. [PI Record Keeping Requirements]
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TRANSPORTATION

YES	NO	Live animals are transported outside of the vivarium by your lab. <i>(If you checked NO, skip this section)</i>
YES	NO	Any laboratory room(s) where live animals are taken, housed, used for any procedures, or euthanized, are listed in the protocol. [IACUC Policy 33]
YES	NO	A description of how animals will be transported is described in the protocol. [IACUC Policy 33]
YES	NO	Cages in the lab are labeled with the PI name, protocol number, name of lab contact, and the date and time that the animal was brought to the lab. Animals are not kept in the lab for more than 12 hrs. [IACUC Policy 36]
YES	NO	During transport outside of the vivarium, animals are obscured from view and properly secured to prevent escape. [IACUC Policy 33]
YES	NO	Empty animal boxes/cages are promptly returned to the vivarium. [IACUC Policy 23]

DRUGS AND MEDICAL SUPPLIES

YES	NO	Drugs and/or compounds (therapeutic or experimental) are administered to animals in your lab. <i>(If you checked NO, skip this section)</i>
YES	NO	All drugs, suture, and medical supplies are within their expiration date. [IACUC Policy 32]
YES	NO	Regarding the use of pharmaceutical-grade compounds: [IACUC Policy 31] <ul style="list-style-type: none"> • Unless otherwise approved by the IACUC, pharmaceutical-grade substances, including diluents and vehicles, are always used when available, even in acute procedures.
YES	NO	<ul style="list-style-type: none"> • The preparation, use and storage of non-pharmaceutical grade compounds administered to animals (e.g. drugs ordered from Sigma) are described on the protocol. <i>If your lab does not use any non-pharmaceutical grade compounds, check here</i>
YES	NO	Drugs, such as anesthetics, that are not held within their original containers are labeled with the concentration (e.g. mg/ml) and expiration dates for each ingredient, including diluents. [IACUC Policy 34] [Guidelines on the Use of Injectable Drugs in Animals]
YES	NO	Regarding the use of controlled substances: [Controlled Substances Program] <ul style="list-style-type: none"> • Accurate records of the use of controlled substances (drugs) are maintained.
YES	NO	<ul style="list-style-type: none"> • Controlled drugs are locked in a Controlled Substances program-approved location. Only personnel listed on the Controlled Substance Use Authorization (CSUA) have access to controlled substances.
YES	NO	<ul style="list-style-type: none"> • All expired controlled drugs are properly discarded or relinquished to EH&S according to regulations. <i>If your lab does not use controlled substances, check here</i>
YES	NO	The use of paralytics is described in the protocol and approved by the IACUC. Paralytics are never used without anesthesia. Proper documentation is maintained. [IACUC Policy 10] <i>If your lab does not use paralytics, check here</i>

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ANESTHESIA		
YES	NO	Animals are anesthetized by your lab. <i>(If you checked NO, skip this section)</i>
YES	NO	Anesthetized animals are NEVER left unattended. [IACUC Policy 34]
YES	NO	An IACUC-approved warming device is used to maintain body temperature during anesthetic periods lasting over 30 minutes. The warming device is described on the protocol. [IACUC Policy 34]
YES	NO	For non-rodent mammals, peri-anesthetic records (pre, during and post) are maintained even for procedures that do not involve surgery (e.g., imaging, ocular procedures). [IACUC Policy 34] <i>If your lab does not anesthetize non-rodent mammals, check here</i>
YES	NO	If an open drop method for delivering isoflurane is used to anesthetize rodents, the animals are prevented from coming in direct contact with liquid isoflurane. [IACUC Policy 34] [Anesthesia Equipment] <i>If your lab does not use open drop isoflurane, check here</i>
ALL SURGERY		
YES	NO	Surgery is performed by your lab. <i>(If you checked NO, skip to Breeding Colony section)</i>
YES	NO	Rodents and non-mammals are allowed to acclimate for at least 48 hours following animal acquisition before performing surgery. Non-rodent mammals are allowed to acclimate for at least 72 hours. [IACUC Policy 7] [IACUC Policy 35]
YES	NO	No animal undergoes more than one major survival surgery unless approved by the IACUC. [IACUC Policy 7] [IACUC Policy 35] <i>If animals in your lab do not undergo more than one major survival surgery, check here</i>
YES	NO	The surgery area is free of unnecessary equipment and supplies. [IACUC Policy 7] [IACUC Policy 35]
YES	NO	When surgery is performed on rodents and non-mammals, steps are taken to minimize unnecessary traffic and assure security in the area used for surgery. [IACUC Policy 35] <i>If your lab does not perform surgery on rodents or non-mammals, check here</i>
YES	NO	Surgery is performed using the anesthesia regimen described in the protocol. The anesthetist and/or surgeon are trained on how to monitor the depth of anesthesia. [IACUC Policy 7] [IACUC Policy 35]
YES	NO	Animals are continually monitored for anesthetic depth and basic physiologic function from the time of anesthetic induction to the return of the animal to its home cage or enclosure (or euthanasia for terminal procedures). Anesthetized animals are NEVER left unattended. [IACUC Policy 7] [IACUC Policy 35]
YES	NO	In addition, for surgery in non-rodent mammals: [IACUC Policy 7] <ul style="list-style-type: none"> • A pre-surgical health assessment is performed and documented.
YES	NO	<ul style="list-style-type: none"> • Depth of anesthesia is monitored frequently throughout the surgery and all parameters as described on the protocol, are recorded in the surgery records. <i>If your lab does not perform surgery on non-rodent mammals, check here</i>

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SURVIVAL SURGERY

YES	NO	Survival surgery is performed by your lab. <i>(If you checked NO, skip to Terminal Surgery section)</i>
YES	NO	Minor surgery on non-rodent mammals and all surgery on rodents, birds, fish, reptiles and amphibians is performed in an area that is not used for any other purpose during surgery and is easily sanitized before and after the procedure. [IACUC Policy 7] [IACUC Policy 35]
YES	NO	Anything entering the surgical field (including instruments, gloved-hands, solutions, suture, etc.) is sterile. Instruments are sterilized prior to surgery and handled to maintain sterility. Devices (catheters, pumps, telemeters, etc.) are sterile at the time of implantation. [IACUC Policy 7] [IACUC Policy 35]
YES	NO	For rodents and non-mammals, instruments are cleaned and the tips re-sterilized in a glass bead sterilizer between animals. For non-rodent mammals, a new sterile pack is used for each animal. [IACUC Policy 7] [IACUC Policy 35]
YES	NO	Hair is removed from the surgical site by clipping or depilation and the surgical site prepared by scrubbing with povidone-iodine or other antiseptic. Alcohol alone is not used for skin preparation. [IACUC Policy 7] [IACUC Policy 35]
YES	NO	Method of skin closure (e.g., absorbable or non-absorbable suture, staples, surgical glue) is described on the protocol. Each tissue layer is closed individually.
YES	NO	An appropriate analgesic is administered intra-operatively and/or post-operatively as described in the protocol. Written records are maintained for all analgesia administration. [IACUC Policy 7] [IACUC Policy 35] <i>If your lab has an IACUC-approved exception to withhold analgesia, check here</i>
YES	NO	Animals are monitored until fully recovered from anesthesia (extubated, conscious, able to maintain normal posturing, etc.). Anesthetized animals are NEVER left unattended. [IACUC Policy 7] [IACUC Policy 35]
YES	NO	Surgical records include the dosage and route of all drugs (anesthetics, analgesics, etc.) administered, type of surgery performed, names of personnel, monitoring parameters, any complications, etc.
YES	NO	For rodents, birds, fish, reptiles and amphibians, the surgeon wears sterile surgical gloves or clean powder-free exam gloves and clean surgical attire (e.g., clean lab coat or gown, hair cover), according to the protocol. [IACUC Policy 35] <i>If your lab does not do surgery on rodents, birds, fish, reptiles or amphibians, check here</i>
YES	NO	For USDA-covered rodents (hamsters, gerbils, guinea pigs, squirrels, etc), new sterile gloves are used for each animal. [IACUC Policy 35] <i>If your lab does not do surgery on USDA-covered rodents, check here</i>
YES	NO	In addition as per IACUC Policy 7 , for survival surgery in non-rodent mammals: <ul style="list-style-type: none"> • Major surgery on non-rodent mammals is performed in an ACP-approved dedicated surgical facility.
YES	NO	<ul style="list-style-type: none"> • Surgery is performed using aseptic technique. <u>Sterile</u> gloves are worn. Anything entering the surgical field (instruments, solutions, suture, catheters, drill bits, pumps, telemeters, etc.) is sterile.
YES	NO	<ul style="list-style-type: none"> • The surgeon performs a surgical scrub/hand wash. The surgeon wears new sterile gloves, gown, cap, mask and shoe covers for each surgery.
YES	NO	<ul style="list-style-type: none"> • Aseptic preparation of the animal includes performing a circular scrub, alternating between an antiseptic (e.g., povidone iodine, chlorhexidine) and alcohol and is repeated three times. Sterile surgical drapes are used. <i>If your lab does not work with non-rodent mammals, check here</i>

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		POST SURGICAL MONITORING
YES	NO	Post-op care is fully described in the protocol and is strictly followed, as is the IACUC policy. Monitoring includes weekends and holidays and is performed by trained individuals. [IACUC Policy 7] [IACUC Policy 35]
YES	NO	Records are kept in the animal holding area until the animal is euthanized. Records are readily and independently accessible to an inspector. [IACUC Policy 7] [IACUC Policy 35]
YES	NO	Cage cards are clearly labeled (e.g. orange post-op sticker) with the surgery performed and the date including the month, day and year. Post-operative records are kept in the animal housing room until the death of the animal. [IACUC Policy 7] [IACUC Policy 35]
YES	NO	The analgesic described on the protocol is on-hand before performing surgery. Signs of pain and distress are described in the protocol. Personnel are proficient in recognizing pain and distress in animals. [IACUC Policy 26]
YES	NO	Written records are maintained for all analgesia administration. Analgesics are administered at the dosage and frequency described in the protocol. [IACUC Policy 7] [IACUC Policy 35] <i>If your lab has an IACUC-approved exception to withhold analgesia, check here</i>
YES	NO	In the event of a veterinary medical emergency, personnel know how to contact ACP Veterinary Staff. [ACP Beacon]
YES	NO	If an animal exhibits signs of pain, distress, discomfort or other health complications, the animal is monitored daily until the problem is resolved. Unexpected pain or distress is reported to ACP Veterinary Staff. [IACUC Policy 7] [IACUC Policy 35]
YES	NO	Suture and/or surgical staples are removed upon wound healing or within 14 days, unless wound is not healed within that time. [IACUC Policy 7] [IACUC Policy 35] <i>If sutures or staples are not used, check here</i>
YES	NO	Post-operative observations are documented at least daily until: [IACUC Policy 7] [IACUC Policy 35] <ul style="list-style-type: none"> • the surgical site is healed or at least five days after surgery, whichever is longest.
YES	NO	<ul style="list-style-type: none"> • signs of pain, distress, discomfort or other health complication is resolved.
YES	NO	<ul style="list-style-type: none"> • exposed or externalized instruments, catheters, bandages, etc. are removed and the associated surgical site is healed. <i>If animals in your lab do not have exteriorized implants, check here</i>
YES	NO	Post-operative observations are documented at least weekly following the initial post-op period for any animals with interiorized instrumentation/catheterization (e.g. alzet pump). [IACUC Policy 7] [IACUC Policy 35] <i>If animals in your lab do not have interiorized implants, check here</i>
YES	NO	Post-operative observations continue to be documented at least weekly following the initial post-op period for all non-rodent mammals. [IACUC Policy 7] <i>If your lab does not perform survival surgery on non-rodent mammals, check here</i>
YES	NO	For USDA-covered species (e.g., all non-rodent mammals, hamsters, gerbils, guinea pigs), observations of animal health include descriptive language and are documented on an approved Post-Surgical Progress Notes form. [Record Keeping for Covered Species] [IACUC Policy 7] <i>If your lab does not perform survival surgery on USDA-covered species, check here</i>

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TERMINAL SURGERY

YES	NO	Terminal surgery, in which the animal is euthanized while still under anesthesia, is performed by your lab. <i>(If you checked NO, skip this section)</i>
YES	NO	Terminal surgery is performed in a clean area. Surgical instruments are cleaned before use. The surgeon wears gloves. [IACUC Policy 7] [IACUC Policy 35]
YES	NO	For terminal surgery lasting longer than 8 hours, aseptic technique is used and survival surgery requirements are followed. [IACUC Policy 7] [IACUC Policy 35] <i>If terminal surgery never extends past 8 hours check here</i>
YES	NO	For non-rodent mammals, documentation of monitoring follows survival surgery requirements. [IACUC Policy 7] <i>If your lab does not perform terminal surgery on non-rodent mammals, check here</i>

BREEDING COLONY

YES	NO	Breeding colony records are maintained by your laboratory. The number of animals born is counted at birth, not at weaning. Breeding Colony Reports are submitted online every month to the IACUC, even if there are zero animals born. [IACUC Policy 6] <i>If your lab does not breed animals, check here</i>
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BLOOD COLLECTION

YES	NO	Blood collection is performed as described on the approved protocol and adheres to IACUC Policy 5 . <i>If your lab does not perform blood collection, check here</i>
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FOOD/WATER MANIPULATION

YES	NO	Regarding food and/or water restriction: [IACUC Policy 37] <ul style="list-style-type: none"> • Food and/or water restriction is scientifically justified and performed as described in the IACUC protocol.
YES	NO	<ul style="list-style-type: none"> • The date and time the animals were fed or given water, and amount if applicable, is documented daily. Records are kept in the animal housing room.
YES	NO	<ul style="list-style-type: none"> • Cages are labeled with a description of the approved restriction schedule, contact name, email and phone. <i>If food and/or water restriction is not performed by your lab, check here</i>
YES	NO	Regarding non-standard diets and treated food and/or water: [IACUC Policy 37] <ul style="list-style-type: none"> • The use of special or treated food/water (high fat diet, doxycycline chow, antibiotics in drinking water, etc.) is described in the protocol.
YES	NO	<ul style="list-style-type: none"> • Animals receiving treated water, special diets or food supplements have cages labeled with a description of the special or treated feed/water as well as contact name, phone and email.
YES	NO	<ul style="list-style-type: none"> • If used, special diets are in-date, labeled and properly stored (e.g., tightly fitted lid, refrigerated). <i>If non-standard food and/or water is not used (e.g., compound added to water, special diets), check here</i>

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EUTHANASIA

YES	NO	The method(s) of euthanasia performed match(es) what is described in the protocol. [IACUC Policy 13]
YES	NO	All personnel understand that gas and chemical euthanasia methods in rodents must be followed by a secondary physical method (cervical dislocation, bilateral thoracotomy, perfusion, vital organ removal, decapitation) to ensure death, as described in the protocol. [IACUC Policy 13] <i>If your lab does not use rodents check here</i>
YES	NO	An ACP-approved apparatus which has a 10-30% displacement rate is used to deliver CO ₂ . [IACUC Policy 13] <i>If CO₂ is not used as a method of euthanasia, check here</i>
YES	NO	If decapitation is used for euthanasia, all scissors and guillotines are maintained and sharpened regularly. Documentation of use and maintenance is kept near the equipment and is available to inspectors. [Euthanasia Equipment Maintenance] <i>If your lab does not perform decapitation as a method of euthanasia check here</i>
YES	NO	Regarding animal carcass disposal: [EH&S Waste Disposal] [Disposal Pathway]
YES	NO	<ul style="list-style-type: none"> • There is prompt disposal of animal carcasses. Maximum refrigerated storage time is 7 days.
YES	NO	<ul style="list-style-type: none"> • Animals are disposed of in a clear bag labeled with the PI name, protocol number, species and date.
YES	NO	<ul style="list-style-type: none"> • Mice, zebrafish and other genetically modified or infectious animals are discarded in a red pathological waste container. All other species are placed in an ACP rendering waste/disposal container.
YES	NO	<ul style="list-style-type: none"> • Animals contaminated with a chemical (e.g. paraformaldehyde) are picked up by EH&S as hazardous waste.

NEOPLASIA

YES	NO	Experimental neoplasia (tumors) is induced by your lab. <i>(If you checked NO, skip this section)</i>
YES	NO	Cage cards describe the experimental tumor model (e.g., genetically engineered mutation, exposure to carcinogen, cell injection). If applicable, the date including the month, day and year the tumor was induced and the expected latency period is also indicated. [IACUC Policy 9]
YES	NO	Tumor monitoring records are kept within the housing room until the death of the animal. Records contain all pertinent information, including: <ul style="list-style-type: none"> • protocol number, • name of person monitoring the animals, • identification of the animals, • dates of monitoring sessions, • any treatments given to the animals, • baseline and weekly weights; or as described in the protocol. [IACUC Policy 9]

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NEOPLASIA, continued

YES	NO	Unless otherwise specified in your protocol, animals are monitored at the following frequency: [IACUC Policy 9] <ul style="list-style-type: none"> Stage 1: No visible, palpable, clinical, or behavioral signs of tumor burden. Animals in Stage 1 are monitored weekly. Stage 2: Visible or palpable tumors; Changes in appearance or behavior. Animals in Stage 2 are monitored twice a week. Stage 3: Any signs of morbidity or mortality; Subcutaneous tumor diameter in excess of 1.5cm (for mice) or 3.0cm (for rats) as determined by the largest diameter. Animals in Stage 3 are monitored daily. <p><i>If your lab has an IACUC-approved exception to Policy 9 regarding monitoring, check here</i></p>
YES	NO	Immediate euthanasia is performed: [IACUC Policy 9] <ul style="list-style-type: none"> If an animal is unable to ambulate (move) in order to get to food and water, If an animal displays unrelieved clinical signs of pain or distress, If an animal is moribund, If an animal has lost more than 20% of its pre-procedure body weight, If a tumor becomes ulcerated or necrotic, If a single subcutaneous tumor <ul style="list-style-type: none"> Exceeds 2cm in diameter (for mice) or 4cm (for rats), OR If the combined volume of multiple subcutaneous tumors exceeds 4cm³ (mice) or 32cm³ (rats) <p><i>If your lab has an IACUC-approved exception to Policy 9 regarding euthanasia criteria, check here</i></p>

OCCUPATIONAL HEALTH & SAFETY

YES	NO	N/A	Gas cylinders are appropriately secured (e.g., upper and lower non combustible chain or strap). [Compressed Gas Safety]
YES	NO	N/A	Brightly colored stickers (available from ACP) are posted on cage cards when hazardous materials are used (e.g., biohazard, chemical hazard, radioactive). [IACUC Policy 36]
YES	NO	N/A	Personnel have read the Occupational Health & Safety Hazards in the Animal Research Setting document and Occupational Health & Safety Program brochures are posted in your lab area. Additional brochures are available from the Vivarium Safety Officer (858-245-0670).
YES	NO	N/A	Biosafety cabinets and fume hoods have been certified within the past year. Local exhaust setups (e.g. snorkels) are certified at the frequency specified by EH&S. [Engineering Controls]
YES	NO	N/A	Animal use areas are clearly separated from human food/drink areas. [Lab Clean Areas]
YES	NO	N/A	Anesthetic gases are properly scavenged per EH&S standards. [Safe Use of Anesthetic Gas]
YES	NO	N/A	A EH&S-approved sharps disposal system is used. Needles are NOT re-capped. [Sharps Disposal]
YES	NO	N/A	All personnel who use MS-222 (Tricaine-S/Finquel) know how to properly prepare and handle the drug safely. [Guidelines for the Use of MS-222]

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SATELLITE FACILITIES		
YES	NO	Animals are kept in the lab longer than 12 hours <i>(If you checked NO, skip this section)</i>
YES	NO	For animals that are kept in the lab longer than 12 hours, a satellite facility is described in the protocol and is approved by the IACUC. [IACUC Policy 28]
YES	NO	The animal holding area is secure from public access. [Satellite Facility SOP]
YES	NO	Personnel responsible for animal husbandry have been properly trained and training records are available to inspectors. [Satellite Facility SOP]
YES	NO	Personnel responsible for animal husbandry follow the ACP species-specific husbandry SOP. [IACUC Policy 28] [Satellite Facility SOP]
YES	NO	A Satellite Facility SOP has been approved by the Animal Care Program and is clearly posted in the housing area. All aspects of the SOP are followed. [Satellite Facility SOP]
YES	NO	After-hours emergency lab contact numbers are clearly posted. [Satellite Facility SOP]
YES	NO	The Room Check List (RCL) is clearly posted, filled-in daily, and is available to inspectors for three years. [Satellite Facility SOP]
YES	NO	All required postings are in place (safety signage, reporting animal concerns poster, restricted species (if applicable), etc.). [Satellite Facility SOP]
YES	NO	All personnel have read IACUC Policy 28 on Satellite Animal Facilities and the applicable Satellite Facility Level 1 or Level 2 SOP and are strictly adhered to by all personnel.
YES	NO	Animals are monitored <u>daily</u> including holidays and weekends. Daily health observations are reported to ACP Veterinary Staff 7 days per week. [Satellite Facility SOP]
YES	NO	Food is stored in a container with a tightly fitted lid and is labeled with the contents, mill date and expiration date. Perishable food (e.g. vegetables) is labeled with the date purchased or received. Food is stored appropriately (e.g., refrigerator, freezer).
YES	NO	Soiled caging is promptly returned to the vivarium or properly disposed. There are no dirty cages in the lab. [IACUC Policy 23]
YES	NO	The room and the surfaces of the animal area are sanitized with a disinfectant solution at least weekly or as otherwise specified in the ACP Holding Room Sanitation SOP. Personnel have a copy of the applicable ACP SOP. Sanitation is recorded on the room check list. [Satellite Facility SOP]