**Please make sure you sign and date the last page**

Submit an original of this application, signed and dated, to the uacc Coordinator, ACS – TASC2

and an electronic version as an attached file to sfu-uacc@sfu.ca

**I. Category of Invasiveness:** Categories of invasiveness are available at www.sfu.ca/vpresearch/acs. Please read them over and insert the letter (category) that you believe matches your research. If you are unsure, please contact the UACC Coordinator. For new categories D, E the principal investigator or designate will be invited to attend the next UACC meeting. Please call (778)782-4738 for an appointment.

|  |  |  |
| --- | --- | --- |
| CATEGORY**:** (See classification list on web site) | DATE**:** Click or tap to enter a date. | PROTOCOL No**.:** **(Office use only for protocol no.)** |

**II.** Please indicate if your protocol is a renewal or a new protocol. Long-term protocols must be resubmitted after 4 years and are considered as new protocols.

|  |  |  |
| --- | --- | --- |
| New ProtocolYes [ ]   | RenewalYes [ ]   | Old Protocol Number:(See renewal page) |

**III. Principal Investigator:** Only a member of the SFU faculty may submit an application form. Research assistants and students should be listed as associates. Please indicate an emergency contact person, preferably someone who is familiar with your research.

|  |
| --- |
| Principal Investigator: |
| Position: |
| Emergency Contact No.: |
| Facility/Department: |
| Off. Phone: | Home Phone: | Laboratory Phone: |
| Fax: | Email Address: |
| Location: | Office No.: |  Laboratory No.: |

**IV. TITLE OF PROTOCOL:**

 **GRANT SUBMISSION TITLE:**

 **V. a: EXPLAIN YOUR PROJECT PROTOCOL IN SIMPLE LAY TERMS:** (WE DO NOT HAVE THE ABILITY TO LAY SUMMARIZE YOUR RESEARCH). For all members of the UACC to review your research it is necessary to describe the experiment, state your objectives, describe the manipulations to be conducted with the animals and explain your research design in plain language**.** Some of the UACC members are from the community, and are not versed with the particular jargon of your field. This summary will be reviewed by the CCAC annually.

**V. b: PROTOCOL DESCRIPTION:** Please give a descriptive title with use of keywords that indicates, in lay terms, the nature of the procedures used (**no more than 40 words**). Used to meet reporting procedures of the Canadian Council on Animal Care.

**VI. ANIMALS.** Fill in the applicable information. If possible, provide an alternative strain. If you are unsure, please contact the Senior Lab Technician at the ARC.

|  |  |  |
| --- | --- | --- |
| SPECIES: | SUGGESTED SUPPLIER: | ALTERN. SUPPL.: |
| STRAIN: | ALTERNATE STRAIN: |
| AGE: | AND/OR WEIGHT: |
| OTHER SPECIES: | STRAIN: |
| NUMBER OF MALE: | FEMALE: | TOTAL: |
| DATE REQUIRED: |

**VII**. **TYPE OF EXPERIMENTAL PROTOCOL** (mark the appropriate category)**.** Research protocols are approved for 1 year, teaching protocols per semester.

|  |  |  |
| --- | --- | --- |
| RESEARCH:[ ]  | TEACHING:[ ]  | COURSE NO.: |
| DEPARTMENT: |
| Permit or License No.: |
| Location | ARC/TASC2:[ ]  | ACF:[ ]  | ALCAN:[ ]  | Phone: |
|  | B8202:[ ]  | B8205: [ ]  | Others: |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Starting: | YR: | MO: | DAY: | Ending: | YR: | MO: | DAY: |
| quality control at your cost: | **yes:** [ ]  | **no:** [ ]  |

**VIII. ASSOCIATE INVESTIGATORS AND RESEARCH STAFF.** Please name all associate researchers and staff. Include technicians (Tech), graduate students (Grad) or undergraduates (Ugrad). (When there are more then two names, add another row(s) for the additional name(s). (Work-study and Coop Students, and Volunteers included)

|  |
| --- |
| ASSOCIATE INVESTIGATORS: |
| NAME: | OFF. PHONE: | LAB. PHONE: | HOME PHONE: | EMAIL ADDRESS: |
| **1.** |  |  |  |  |
| **2.** |  |  |  |  |

|  |
| --- |
| RESEARCH STAFF: (title = Tech, **Ug**rad, **G**rad) |
| NAME: | work PHONE: | home PHONE: | TITLE: | EMAIL ADDRESS: |
| **1.** |  |  |  |  |
| **2.** |  |  |  |  |

**IV** Please indicate your **funding source** and provide an account number. To be used for Per Diem Charges.

FUNDING SOURCE:

GRANT NO.:

Account Number: (you can obtain this number from your departmental assistant and it will be invoiced for project costs)

Indicate that this protocol has been peer reviewed for its scientific merit:Yes [ ]  No [ ]

**X**.**a. Primary objectives and rationales**: Provide enough detail to indicate the objectives of the research protocol and why the research protocol needs to be done.

**a. OBJECTIVES AND RATIONALE:**

**X.b. Experimental design:** Please provide detailed information on the procedures to be carried out on live animals. Note if complications are anticipated and what corrective actions will be taken.

**b. EXPERIMENTAL DESIGN**

**c.** **Potential benefits of the protocol**: Describe the probable outcome of the experiments. What are the likely contributions to: human welfare, animal welfare, scientific understanding?

**C. POTENTIAL BENEFITS OF YOUR PROJECT:**

**XI. ANIMAL USAGE** (**METHODOLOGY AND INTENDED STATISTICAL ANALYSIS).** Explain why the species and strain of animals are being requested and provide a rationale for the number of animals being requested (experimental groups & intended statistical analysis). The amendment process takes little time, so if more animals are required they can be obtained easily.

**XII. DESCRIBE ANIMAL HOUSING REQUIREMENTS (IF NOT STANDARD HOUSING) INCLUDING ENVIRONMENTAL ENRICHMENT.** (Please indicate if non-standard temperature, humidity, lighting, ventilation, isolation or special facilities are required). If housing requirements are different from standard laboratory housing, (shoebox cages) used at SFU, please describe and justify (for example, suspended SS wire bottom cages, metabolic cages, etc.). Environmental enrichment has become standard practice across Canada in laboratory animal science. Please describe any environmental enrichment which are going to be used in your project. If you have any questions, please contact the senior staff of the Animal Care Services (ARC).

**XIII. WHAT ARE THE ALTERNATIVES TO THE USE OF LIVE ANIMALS? WHY ARE THEY NOT BEING USED?**

**Note:**

**Researchers not conducting invasive research may skip the following sections XIV-XVII**

**Sections XVIII-XXVI only have to be completed when applicable.**

**For wildlife studies, any other information pertinent to field studies, such as capture of nontarget species, ecological impacts and potential injuries or mortality, during capture or transportation, if relevant, should be added to this form as an appended page.**

**Non-Invasive verses Invasive:** For a description of the differences, see instructions. If there is any question concerning your protocol, please contact the Director, Animal Care. Approval from the Biosafety Committee may be required **prior to starting your project**.

**XIV. DANGERS - HAZARDS.** If hazardous materials are to be used, both the University Animal Care Committee and the safety committee will have to approve the facilities for handling the materials. This section is to alert people who may be working with the animals of potential dangers and to ensure that appropriate precautions are being taken to protect both people and animals.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  Yes: |  |  No: |  |  |  |
| Biohazard  |  |  |  |  |  |  |
| Infection to Staff |  |  |  |  |  |  |
| Infection to Animals |  |  |  |  |  |  |
| Agent or Chemical(s) |  |  |  |  |  |  |
| Carcinogen |  |  |  |  |  |  |
| Radioisotopes |  |  |  |  | Permit Number: |  |
|  |  |  |  |  |  |  |

**XV. DESCRIPTION/FORM OF AGENT/ROUTE OF ADMINISTRATION/INFECTION AND DOSE.** Describe the form of the agent, route of administration, expected complications and any unknown variables. Include where indicated, dose, excretion route and duration of excretions.

Dosage: Route of Excretion:

duration until Excretions:

**XVI. POSSIBLE HARM AND PRECAUTIONS.** Describe the possible harms and precautions that will be taken for both the researcher and the animal.

**XVII-XIX.** Post surgery care can make the differences between survival of your research animals and death. Please describe the post-surgery care that you will use in your project. Post-surgery analgesics have become standard in animal surgical protocols. Please detail the post-surgery care and analgesics being used.

**XVII. SURGERY, ANESTHETICS AND ANALGESICS**

Where surgery is performed, the procedure must be in accordance with an established veterinary practice in the province of B.C.

Location:

Performed by who:

Qualifications:

Approved By:

**XVIII. ANESTHETICS AND ANALGESICS**

Anesthetics Used:

Dosages: Route:

Analgesics Used:

Dosages: Route:

Antibiotics:

Dosages: Route:

**XIX. PLEASE DESCRIBE POST-SURGERY CARE; INCLUDING ANALGESIC REGIME AND RESPONSIBLE PARTY**

**XX. MANIPULATIONS PERFORMED WITH ANIMALS**

**contentious issues**: The following types of experiment are generally considered to be of a contentious nature. Please indicate with an "X" if any of these conditions apply to your research, and describe it in the space provided below.

Contentious manipulations and their rationale will be examined more closely, by both the UACC and the CCAC.

|  |  |
| --- | --- |
|  |  YES |
| 1. physical restraint |  |
| 2. Food and water deprivation |  |
| 3. extreme variations in environment (heat, cold, light etc.) |  |
| 4. Use of neuromuscular agents |  |
| 5. electroshock or negative reinforcement |  |
| 6. burns, fractures or severe burns |  |
| 7. studies in which the death of the animal is a required parameter, i.e. LD50, infection, etc. |  |
| 8. predator/prey of fighting experiments |  |
| 9. stressful or invasive procedures with recovery for demonstration or teaching |  |
| 10.exercise or exhaustion studies |  |
| 11.multiple surgeries |  |
| 12.alterations of sensory systems which cause changes in behavior or welfare of the animal |  |
| 13.freund's complete adjuvant |  |
| 14.freund's incomplete adjuvant |  |
| 15.Others (Please specify) |  |

**if yes to any of the above (1-15) please answer the following question in the box provided below**

1. justifications for the conditions being imposed

2. precise details regarding these conditions e.g. duration of restraint, frequency and intensity of electroshock etc.

3. an assessment of the anticipated effects on the animals and any possible complications

4. measures taken to eliminate or minimize any pain, discomfort or stress and the actions that will be taken if this goes beyond that which is predicted by the experimental design

5. how many animals will be subjected to the conditions indicated

6. end point [COMPLETE ENDPOINT AGREEMENT FORM IF CATEGORY D OR E]

7. equipment needed

**CONTENTIOUS ISSUES:**

**XXI. a METHODS OF EUTHANASIA (Please indicate dose).**  Several techniques of euthanasia are available, some involving the use of chemicals. The technique chosen should induce unconsciousness rapidly with death following soon after. If a physical method of euthanasia is required, because the use of the drug is likely to jeopardize the results of the study, the technique should be approved by the UACC. Demonstration of the technique may be required. Consult the senior staff of the Animal Resources Centre.

OVERDOSE WITH PENTOBARBITAL: DOSE ROUTE OF ADMINISTRATION:

EXSANGUINATION WITH ANESTHESIA: TYPE OF ANESTHESIA:

DOSE: ROUTE:

DECAPITATION:

CERVICAL DISLOCATION:

CO2 CHAMBER:

OTHER (Please specify):

DESCRIPTION OF THE FATE OF ANIMALS, IF THEY ARE NOT TO BE EUTHANIZED:

Euthanasia by ARC PERSONNEL Yes [ ]  No [ ]

Unconditional assignment to ARC Yes [ ]  No [ ]

**XXI.b**. in the event of an animal experiencing severe pain or suffering and the p.i. or designate can not be reached, the animal will be euthanized by the Animal Resource Centre staff. Please leave any instructions or procedures what to be done before the euthanasia, (i.e. bleed, collect tissues, perfuse, etc.)

**instructions and/or procedures:**

**alternate contacts:**

|  |  |
| --- | --- |
| name: | telephone number: |
| name: | telephone number: |

**Appendix 1 –MONITORING & ENDPOINT AGREEMENT**

1) What exactly is the information/data that is being sought or required as a result of the experimental procedure being done on the animals? Why is it important?

**2) At what point in the time frame of the study could you start to expect the animal to experience pain or distress?**

3a) What are the “indicators” of pain and/or distress that the animals can be expected to show? Is there a well-defined progression of clinical signs that one would anticipate seeing?

3b) How will the endpoint be determined?

4) What will be the monitoring frequency once the animals show signs of pain/distress in the experiment? (The baseline parameter is that a normal animal should be examined at least once per 24-hour period).

5a) Who will do the observations from the research group? Are these individuals competent in recognizing the indicators discussed above?

**5b) Please provide contact information for the person(s) from the research group that will be performing observations.**

6) What are the reporting mechanisms of the results of monitoring once the animals are reaching the endpoint?

7) The ARC Veterinary staff have authority to euthanize any animal deemed to be in pain or distress. However, a reasonable effort will be made to communicate in advance with the researcher. Who has the authority to euthanize in the researcher’s group? (To perform euthanasia they must have been taught by our ARC Veterinary staff or the equivalent at previous institutions.)

**8. The Animal Resources Centre staff will be observing your animals once daily as part of a routine check on animal health. Additional monitoring will be conducted according to your protocol needs. At the present time there is no fee for this service. An observation checklist and monitoring documentation sheet, specific for your protocol, is required. Please attach a copy of the sample form if it differs from our standard form.**

9) Are there any special instructions for sample collection that need to be taken from the animal at the time of euthanasia or at the time of an unexpected death being reported?

**10) Animal users are required to report to the UACC *Reportable Animal Welfare Incidents*. Such incidents are determined based on defined criteria, including mortality that exceeds expected levels (see *FAQ, CCAC Reportable Animal Welfare Incidents* (February 2022).**

**Accordingly, please estimate the expected mortality emergent from this protocol in the space provided below. Within the application, be sure to justify the expected animal mortality based upon the recognized mortality ranges, literature, experiences from your field, and/or industry standards.**

**TO ESTIMATE THE EXPECTED MORTALITY, CHOOSE ONE OF THE TWO OPTIONS BELOW:**

**Option 1: Your protocol has only one objective; or the components within the protocol are all interdependent.**

**What is the expected animal mortality percentage for this protocol? \_\_\_\_\_\_\_\_**

**OR**

**Option 2: Your protocol contains multiple components or objectives that are independent.**

**Please label each component or objective and estimate the expected animal mortality percentage for each.**

**Component #1 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Expected mortality percentage \_\_\_\_\_\_\_\_\_\_\_\_**

**Component #2 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Expected mortality percentage \_\_\_\_\_\_\_\_\_\_\_\_**

**Component #3 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Expected mortality percentage \_\_\_\_\_\_\_\_\_\_\_\_**

**Component #4 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Expected mortality percentage \_\_\_\_\_\_\_\_\_\_\_\_**

**If mortality associated with this protocol is 20% or more above the expected mortality percentage you indicated above, you are obligated to immediately contact uacc-mawi@sfu.ca and provide your name and telephone number. You will thereafter be contacted for follow-up.**

**Notwithstanding the obligations outlined above, for issues requiring immediate animal welfare interventions contact:**

**Nicole Belanger, RVT, RLAT; Manager, Animal Care Services;**

**TASC2-ARC, Rm 6671; 778-782-5905;**

**nba36@sfu.ca** **or** **acf@sfu.ca**

**and**

**Taryn Yezek, Veterinarian**

**t\_yezek@sfu.ca**

*(Last revised November 2023)*

**RENEWAL PAGE FOR PROTOCOLS CONTINUING BEYOND 4 YEARS.** (Ignore if this is not applicable)

A protocol may be renewed for up to 4 years (3rd renewal). This page must be completed for protocols in their 4th years. At the 4th year, the protocol is assessed as a new protocol. Therefore, the entire protocol form has to be completed; incorporating previous amendments and the project will receive a new protocol number. Please indicate your old protocol number on the front page ("Old protocol number").

**THE SIMON FRASER UNIVERSITY ANIMAL CARE COMMITTEE REQUIRES AT THIS STAGE THE FOLLOWING INFORMATION:**

**XXIV. PROGRESS REPORT.**

**XXV. CURRENT STATUS.**

**XXVI. FUTURE DIRECTIONS AND THE EXPECTED COMPLETION DATE.**

PRINCIPAL INVESTIGATOR: DATE:

**Teaching Projects Only** (Teaching projects are only approved for a single semester. Applicants may be asked

to attend the UACC meeting in person to explain their use of animals for teaching)

Location of the teaching project building: Room Number:

Technicians Name:Phone number:

Qualifications:EMAIL ADDRESS:

**XXII. PLEASE EXPLAIN WHY LIVE ANIMALS ARE NEEDED FOR TEACHING.** Only projects being used for teaching should complete this page. Teachers may be asked to address the UACC and provide the rationale of the use of animals. Alternatives to the use of live animals for teaching are plentiful. Indicate if there are alternatives to using animals in your class, and if so, are they being utilized. Teaching projects are only approved for a single semester. Please duplicate this page.

**XXIII. WHAT ARE THE ALTERNATIVES TO THE USE OF LIVE ANIMALS? WHY ARE THEY NOT BEING USED?**

**DECLARATION (TO BE SIGNED BY PRINCIPAL INVESTIGATOR)**

1. ALL animals used in this research protocol will be cared for in accordance with the recommendations of the Canadian Council on animal Care, and the regulations and policies of S.F.U. UACC and Animal Care Services.
2. All personnel under my supervision in the protocol have **appropriate training and experience** in the handling of Animals, or will undertake such training prior to the project.
3. All researchers using wild animals for research and/or teaching will hold proper Provincial and/or Federal permits.

**(Principal Investigator) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (Also sign # 1, in Please Note section)**

(Approval Director, ACS) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**PLEASE NOTE:**

**A.** All animal procedures used must be in accordance with the Canadian Council on Animal Care documents, “Guide to the Care and Use of Experimental Animals” and “Ethics of Animal Experimentation”. Copies of these documents are available online at [www.ccac.ca](http://www.ccac.ca) under “publications”.

**B.** If, in the opinion of the Director of Animal Care, a procedure is proposed or used which in any way is questionable in terms of these guidelines, this matter will be referred to the University Animal Care Committee for their decision.

**1. Signed (Principal Investigator) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Date:\_\_\_\_\_\_\_\_\_\_\_\_**

RENEWAL:

2. Signed (Principal Investigator) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Date:\_\_\_\_\_\_\_\_\_\_\_\_

3. Signed (Principal Investigator) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Date:\_\_\_\_\_\_\_\_\_\_\_\_

4. Signed (Principal Investigator) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Date:\_\_\_\_\_\_\_\_\_\_\_\_

TO BE FILLED OUT BY DIRECTOR OF ANIMAL CARE SERVICES

Recommendation for action to Chairperson University Animal Care Committee:

1. Signed (Director A.C): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Date:\_\_\_\_\_\_\_\_\_\_\_\_

RENEWAL:

2. Signed (Director A.C): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Date:\_\_\_\_\_\_\_\_\_\_\_\_

3. Signed (Director A.C): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Date:\_\_\_\_\_\_\_\_\_\_\_\_

4. Signed (Director A.C): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Date:\_\_\_\_\_\_\_\_\_\_\_\_

TO BE FILLED OUT BY VETERINARIAN OF ANIMAL CARE SERVICES

Recommendation for action to Chairperson University Animal Care Committee:

1. Signed (Veterinarian A.C): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Date:\_\_\_\_\_\_\_\_\_\_\_\_

RENEWAL:

2. Signed (Veterinarian A.C): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Date:\_\_\_\_\_\_\_\_\_\_\_\_

3. Signed (Veterinarian A.C): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Date:\_\_\_\_\_\_\_\_\_\_\_\_

4. Signed (Veterinarian A.C): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Date:\_\_\_\_\_\_\_\_\_\_\_\_

TO BE FILLED OUT BY COMMUNITY MEMBER OF THE UNIVERSITY ANIMAL CARE COMMITTEE

1. Signed (Community Member U.A.C.C.): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Date:\_\_\_\_\_\_\_\_\_\_\_\_

RENEWAL:

2. Signed (Community Member U.A.C.C.): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Date:\_\_\_\_\_\_\_\_\_\_\_\_

3. Signed (Community Member U.A.C.C.): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Date:\_\_\_\_\_\_\_\_\_\_\_\_

4. Signed (Community Member U.A.C.C.): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Date:\_\_\_\_\_\_\_\_\_\_\_\_

TO BE FILLED OUT BY CHAIRPERSON OF THE UNIVERSITY ANIMAL CARE COMMITTEE

Protocol approved YES\_\_\_ NO\_\_\_ (statement of reasons attached)

1. Signed (Chairperson U.A.C.C.): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Date:\_\_\_\_\_\_\_\_\_\_\_\_

RENEWAL:

2. Signed (Chairperson U.A.C.C.): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Date:\_\_\_\_\_\_\_\_\_\_\_\_

3. Signed (Chairperson U.A.C.C.): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Date:\_\_\_\_\_\_\_\_\_\_\_\_

4. Signed (Chairperson U.A.C.C.): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Date:\_\_\_\_\_\_\_\_\_\_\_\_