



Animal Research Facility

To: Animal Program Users and Administrators
From: Jeri Lyons, Associate Vice President for Research and Dean of the Graduate School, Laura Martin, Director of Compliance and Operations, Animal Care and Use Program, and Tim Stitt, Manager of UNC Animal Research Facility
Cc: Mark Anderson, Provost, and Chris Saxton, Director of Research and Sponsored Programs
Date: November 23, 2020
Re: Animal Research Facility Per Diem Fee Structure Update

The proper care of laboratory animals involves attending to a range of physical and mental needs. This includes providing clean, appropriately lighted and well-ventilated housing, the ability to exercise, proper feeding, and veterinary health care. ARF is committed to delivering these services and maintaining the high standards of animal care and welfare at UNC.

In order to maintain those standards and to continue to provide animal related services, UNC needs to update the per diem charges to recover a portion of the money spent on animal care and use, apply applicable indirect costs returns and to reduce the amount the university subsidizes.

How were the revised per diems calculated?

When developing the adjusted rates, the principals of the NIH's [*Cost Analysis and Rate Setting Manual for Animal Resource Facilities*](#) were applied.

Those NIH provided guidelines are:

1. *Billing rates should be based on costs.*
2. *The objective should be to operate as closely as possible to a break-even basis.*
3. *Billing rates should be established for all services that can be specifically identified to users and involve significant activities of the ARF.*
4. *All costs associated with providing an animal service should be included in the total cost of each service.*
5. *The costs must be treated consistently as either direct or support costs.*
6. *The assignment of costs to cost centers and the allocation of support costs to direct cost centers should be based on beneficial relationships.*
7. *Billing units should logically represent the service provided.*
8. *All users should be charged consistently at full rates (or the revenue should be imputed).*
9. *Revenue and costs should be compared at least annually to identify surpluses and deficits for each service.*
10. *Adjustments should be made to compensate for surpluses or deficits (variances).*

The adjusted per diem rates for each species was established by applying the NIH principles to identifying the direct costs associated with a species and other relevant unit expenses divided across facility users. From there, the total direct costs for a species was divided by ARF's average number of animals or cages to construct the daily rate. Examples of ARF direct costs are approved capital expenditures for special

purpose equipment or physical plant modification, technical staff time, supplies like feed and bedding, enrichment, and other colony or unit expenses.

Institutional Facilities and Administrative (F&A) (indirect) costs associated with the Animal Care and Use Program were not included in the fee structure. Examples of ARF indirect costs are capital expenditures for general purpose equipment and physical plant depreciation, renovation or maintenance, institutional general administration, and regulatory compliance costs.

Why the increase?

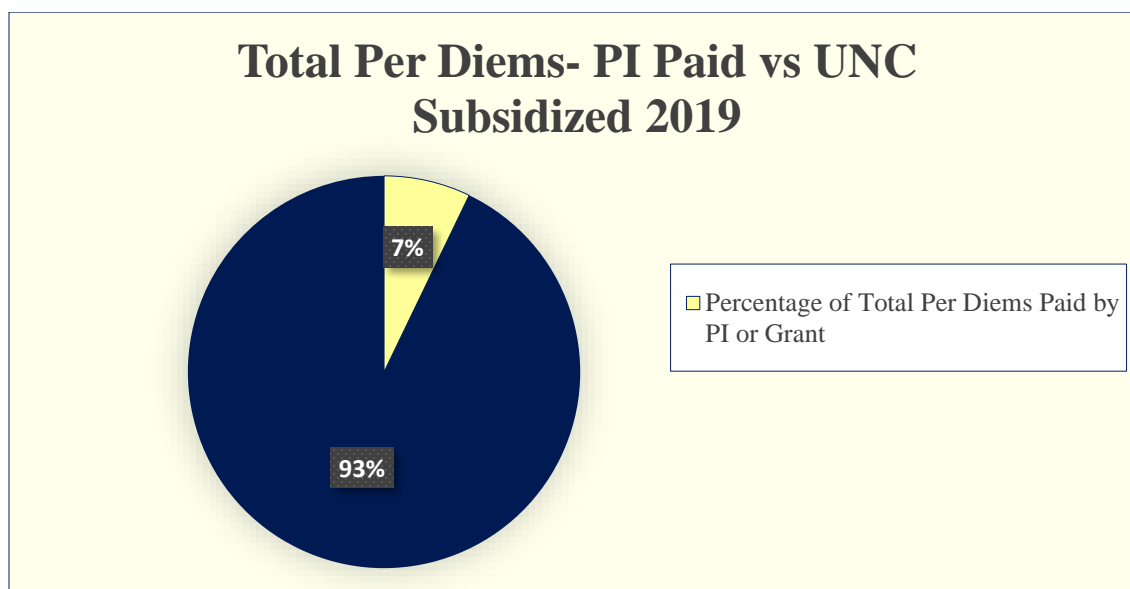
Original per diem rates were figured without the distribution across species of allowable facility updates and direct unit costs like cagewash and facility cleaning tech time and supplies. Also accounted for are revised best practices and the increase cost of food, bedding, enrichment, and other supplies. Additionally, rates have not been adjusted since 2012 with the exception of the recently modified deer mice and zebrafish.

Subsidization Rate Changes

In addition to updating the per diem charges to accurately reflect current costs, ARF must also make adjustments in line with the University's structural deficit alignment strategies and therefore must change its subsidization rates to remain sustainable.

UNC subsidizes the costs of animal housing as part of its investment in the research enterprise. UNC historically subsidized animal care costs on average of 93-97 percent, which is no longer maintainable.

2019 Per Diem Figures				
ARF Direct Costs		Total Per Diems	PI Paid	UNC Subsidized
\$157,000		\$ 81,641.34	\$ 6,282.75	\$ 75,358.59



ARF and its users will need to decrease UNC subsidization by 20 percent each year until year 5 when it is sustained by per diem returns, procedural adjustments, and IDC rates. Depending upon a researcher's affiliation and sources of funding, different per diem subsidization rates may be applied.

What are the adjusted Per Diem Rates?

Rate Comparison: 2012 to 2020

Species	2012-Current	2021
Mouse (per cage)	\$ 0.29	\$ 0.70
Rat (per cage)	\$ 0.54	\$ 1.11
Zebrafish (per tank) *	\$ 0.70	\$ 0.74
Hamster (per cage)	\$ 0.75	\$ 1.11
Deer Mouse (per cage) *	\$ 0.75	\$ 1.11
Snake	\$ 0.16	\$ 0.23
Snake with Misting	\$ 0.31	\$ 0.46
Monitor	\$ 0.22	\$ 0.32
Bat	\$ 1.00	\$ 1.00
Rabbit (Contact ARF)	NA	\$ 5.21
Guinea Pig (Contact ARF)	NA	\$ 3.26

*revised within last 2 years

Per diems will be charged for each day or fraction of a day that a cage or animal is within an ARF managed space and/or receives Animal Care and Use Program services. Cage/animal census counting will be based upon ARF standard practices with assistance of PI and study personnel.

What may be included in Per Diem rates?

- Routine and standard husbandry
- Routine cage changes
- Routine health care (Diagnostics & Treatment)
- Emergency Care (Not caused by research protocols)
- Daily Rounds
- Routine sentinel program (Testing/Bleeding)
- Occupational health monitor or exposures including animal bites and scratches
- Disease outbreak management (Manpower, PPE, diagnostics and lab tests, etc.)
- Euthanasia-related carcass or tissue disposal
- Standardized Environmental enrichment
- Colony health management (vendor quality and vendor approvals)
- Resolution and reporting of facility/equipment alarms and animal emergency triage
- Training and Post Approval Monitoring

- Animal procurement services
- Routine facility inspections, maintenance and repairs
- Routine billing
- Breeding services

Adjusted Per Diem Rates and Projected Future Costs

The table below reflect the costs for fiscal year 2021, beginning January 1, 2021, as well as proposed costs for the next four years. Please use these projected costs when preparing proposal submission forms.

UNC Per Diem Rates						
Species	2020/21	21/22	22/23	23/24	24/25	25/26
Mouse (per cage)	\$ 0.70	\$ 0.74	\$ 0.78	\$ 0.82	\$ 0.86	\$ 0.90
Rat (per cage)	\$ 1.11	\$ 1.17	\$ 1.23	\$ 1.29	\$ 1.35	\$ 1.42
Zebrafish (per tank)	\$ 0.74	\$ 0.78	\$ 0.82	\$ 0.86	\$ 0.90	\$ 0.95
Hamster (per cage)	\$ 1.11	\$ 1.17	\$ 1.23	\$ 1.29	\$ 1.35	\$ 1.42
Deer Mouse (per cage)	\$ 1.11	\$ 1.17	\$ 1.23	\$ 1.29	\$ 1.35	\$ 1.42
Snake	\$ 0.23	\$ 0.24	\$ 0.25	\$ 0.26	\$ 0.27	\$ 0.28
Snake with Misting	\$ 0.46	\$ 0.48	\$ 0.50	\$ 0.53	\$ 0.56	\$ 0.59
Monitor	\$ 0.32	\$ 0.34	\$ 0.36	\$ 0.38	\$ 0.40	\$ 0.42
Bat	\$ 1.00	\$ 1.05	\$ 1.10	\$ 1.16	\$ 1.22	\$ 1.28
Rabbit*	\$ 5.21	\$ 5.47	\$ 5.74	\$ 6.03	\$ 6.33	\$ 6.65
Guinea pig*	\$ 3.26	\$ 3.42	\$ 3.59	\$ 3.77	\$ 3.96	\$ 4.16

This is applying a 5 percent growth rate each year. Published rates may be updated to reflect changing costs.

*For new species, contact ARF to discuss space availability and potential startup costs that incorporate new caging procurement and facility renovation fees as required.