NONPROFIT RATE AGREEMENT

EIN: 1010211513A1
DATE: 03/05/2019
ORGANIZATION:
FILING REF.: The preceding
The Jackson Laboratory
agreement was dated
610 Main Street
05/11/2018
Bar Harbor, ME 04609-1500

The rates approved in this agreement are for use on grants, contracts and other
agreements with the Federal Government, subject to the conditions in Section III.

SECTION I: INDIRECT COST RATES

<table>
<thead>
<tr>
<th>RATE TYPES:</th>
<th>FIXED</th>
<th>FINAL</th>
<th>PROV. (PROVISIONAL)</th>
<th>PRED. (PREDETERMINED)</th>
</tr>
</thead>
</table>

**EFFECTIVE PERIOD**

<table>
<thead>
<tr>
<th>TYPE</th>
<th>FROM</th>
<th>TO</th>
<th>RATE(%) LOCATION</th>
<th>APPLICABLE TO</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIXED</td>
<td>01/01/2018</td>
<td>12/31/2018</td>
<td>69.00 On-Site</td>
<td>Research</td>
</tr>
<tr>
<td>FIXED</td>
<td>01/01/2019</td>
<td>12/31/2019</td>
<td>70.00 On-Site</td>
<td>Research</td>
</tr>
<tr>
<td>FIXED</td>
<td>01/01/2018</td>
<td>12/31/2019</td>
<td>89.00 On-Site</td>
<td>JAX Genom. Med.</td>
</tr>
<tr>
<td>PROV.</td>
<td>01/01/2020</td>
<td>12/31/2021</td>
<td>70.00 On-Site</td>
<td>Research</td>
</tr>
<tr>
<td>PROV.</td>
<td>01/01/2020</td>
<td>12/31/2021</td>
<td>89.00 On-Site</td>
<td>JAX Genom. Med.</td>
</tr>
</tbody>
</table>

*BASE

Total direct costs excluding capital expenditures (building, individual items
of equipment; alterations and renovations), and that portion of each subaward
in excess of $25,000.
**SECTION I: FRINGE BENEFIT RATES**

<table>
<thead>
<tr>
<th>TYPE</th>
<th>FROM</th>
<th>TO</th>
<th>RATE(%)</th>
<th>LOCATION</th>
<th>APPLICABLE TO</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIXED</td>
<td>1/1/2018</td>
<td>12/31/2018</td>
<td>30.00</td>
<td>All</td>
<td>Research Employees</td>
</tr>
<tr>
<td>FIXED</td>
<td>1/1/2019</td>
<td>12/31/2019</td>
<td>32.00</td>
<td>All</td>
<td>Research Employees</td>
</tr>
<tr>
<td>PROV.</td>
<td>1/1/2020</td>
<td>12/31/2021</td>
<td>32.00</td>
<td>All</td>
<td>Research Employees</td>
</tr>
</tbody>
</table>

**DESCRIPTION OF FRINGE BENEFITS RATE BASE:**
Salaries and wages.
SECTION II: SPECIAL REMARKS

TREATMENT OF FRINGE BENEFITS:

The fringe benefits are charged using the rate(s) listed in the Fringe Benefits Section of this Agreement. The fringe benefits included in the rate(s) are listed below.

TREATMENT OF PAID ABSENCES

Vacation, holiday, sick leave pay and other paid absences are included in salaries and wages and are claimed on grants, contracts and other agreements as part of the normal cost for salaries and wages. Separate claims are not made for the cost of these paid absences.

1) Fringe benefits include: Group Health Insurance, LTD Insurance, Pension Plan, Unemployment Compensation, FICA, Travel Insurance, Worker's Compensation, Extended Sick Leave and Accrued Vacation.

2) Equipment means tangible personal property (including information technology systems) having a useful life of more than one year and a per-unit acquisition cost which equals or exceeds the lesser of the capitalization level established by the non-Federal entity for financial statement purposes, or $5,000.

3) The JAX Genom. Med. Rate applies to the Jackson Laboratory for Genomic Medicine and the Genetic Research Facility on the University of Connecticut Health Science Center campus in Farmington, Connecticut.

Your next F&A and Fringe Benefit Proposal based on actual costs for the fiscal year ending 12/31/2018 is due in our office by 06/30/2019.

This rate agreement updates fringe benefit rates only.
SECTION III: GENERAL

A. LIMITATIONS:
The rates in this Agreement are subject to any statutory or administrative limitations and apply to a given grant, contract or other agreement only to the extent that funds are available. Acceptance of the rates is subject to the following conditions: (1) Only costs incurred by the organization were included in its indirect cost pool as finally accepted; such costs are legal obligations of the organization and are allowable under the governing cost principles; (2) The same costs that have been treated as indirect costs are not claimed as direct costs; (3) Similar types of costs have been accorded consistent accounting treatment; and (4) The information provided by the organization which was used to establish the rates is not later found to be materially incomplete or inaccurate by the Federal Government. In such situations the rate(s) would be subject to renegotiation at the discretion of the Federal Government.

B. ACCOUNTING CHANGES:
This Agreement is based on the accounting system purported by the organization to be in effect during the Agreement period. Changes to the method of accounting for costs which affect the amount of reimbursement resulting from the use of this Agreement require prior approval of the authorized representative of the cognizant agency. Such changes include, but are not limited to, changes in the charging of a particular type of cost from indirect to direct. Failure to obtain approval may result in cost disallowances.

C. FIXED RATES:
If a fixed rate is in this Agreement, it is based on an estimate of the costs for the period covered by the rate. When the actual costs for this period are determined, an adjustment will be made to a rate of a future year(s) to compensate for the difference between the costs used to establish the fixed rate and actual costs.

D. USE BY OTHER FEDERAL AGENCIES:
The rates in this Agreement were approved in accordance with the authority in Title 2 of the Code of Federal Regulations, Part 200 (2 CFR 200), and should be applied to grants, contracts and other agreements covered by 2 CFR 200, subject to any limitations in A above. The organization may provide copies of the Agreement to other Federal Agencies to give them early notification of the Agreement.

E. OTHER:
If any Federal contract, grant or other agreement is reimbursing indirect costs by a means other than the approved rate(s) in this Agreement, the organization should (1) credit such costs to the affected programs, and (2) apply the approved rate(s) to the appropriate base to identify the proper amount of indirect costs allocable to these programs.

BY THE INSTITUTION:
The Jackson Laboratory

SIGNATURE: [Signature]

NAME: Joseph A. Vetelino
TITLE: Sr. Director, Budgets & Planning
DATE: 3/12/2019

ON BEHALF OF THE FEDERAL GOVERNMENT:

DEPARTMENT OF HEALTH AND HUMAN SERVICES

SIGNED BY:
Darryl W. Mayes - 5

SIGNATURE:
Darryl W. Mayes
NAME: Deputy Director, Cost Allocation Services
TITLE: 3/5/2019
DATE: 6714

HHS REPRESENTATIVE: Ryan McCarthy

TELEPHONE: (212) 264-2069