COLLEGES AND UNIVERSITIES RATE AGREEMENT

EIN: 104210300C5
ORGANIZATION:
Harvard Medical School Gordon Hall
25 Shattuck Street, #407A
Boston, MA 02115

DATE: 04/28/2010
FILING REF.: The preceding agreement was dated 04/24/2009

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 XII.

SECTION I: INDIRECT COST RATES

<table>
<thead>
<tr>
<th>RATE TYPES:</th>
<th>FIXED</th>
<th>FINAL</th>
<th>PROVID. (PROVISIONAL)</th>
<th>PRED. (PREDETERMINED)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TYPE</td>
<td>FROM</td>
<td>TO</td>
<td>RATE (%) LOCATION</td>
<td>APPLICABLE TO</td>
</tr>
<tr>
<td>PRED.</td>
<td>07/01/2009</td>
<td>06/30/2010</td>
<td>69.50 On-Campus</td>
<td>Research</td>
</tr>
<tr>
<td>PRED.</td>
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<td>06/30/2010</td>
<td>36.80 On-Campus</td>
<td>Other Spons. Act.</td>
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<tr>
<td>PRED.</td>
<td>07/01/2009</td>
<td>06/30/2010</td>
<td>26.00 Off-Campus</td>
<td>All Programs</td>
</tr>
<tr>
<td>PRED.</td>
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<td>06/30/2010</td>
<td>73.50 Primate Ctr.</td>
<td>Research</td>
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<tr>
<td>PRED.</td>
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<td>30.00 Primate Ctr.</td>
<td>CORE Grant</td>
</tr>
<tr>
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<td>07/01/2009</td>
<td>06/30/2010</td>
<td>99.00 Primate Ctr.</td>
<td>Non-Federal Research</td>
</tr>
<tr>
<td>PROVID.</td>
<td>07/01/2010</td>
<td>Until Amended</td>
<td></td>
<td>Use the same rates and conditions as those cited for the fiscal year ending June 30, 2010.</td>
</tr>
</tbody>
</table>

**BASE**

Total direct costs excluding capital expenditures (buildings, individual items of equipment; alterations and renovations), that portion of each subaward in excess of $25,000; hospitalization and other fees associated with patient care whether the services are obtained from an owned, related or third party hospital or other medical facility; rental/maintenance of off-site activities; student tuition remission and student support costs (e.g., student aid, stipends, dependency allowances, scholarships, fellowships).
ORGANIZATION: Harvard Medical School Gordon Hall
AGREEMENT DATE: 04/28/2010

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>7/1/2009</td>
<td>6/30/2010</td>
<td>25.60</td>
<td>All</td>
<td>Faculty</td>
</tr>
<tr>
<td>FIXED</td>
<td>7/1/2009</td>
<td>6/30/2010</td>
<td>42.00</td>
<td>All</td>
<td>Exempt</td>
</tr>
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<td>FIXED</td>
<td>7/1/2009</td>
<td>6/30/2010</td>
<td>54.60</td>
<td>All</td>
<td>Union (Non-Exempt)</td>
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<tr>
<td>FIXED</td>
<td>7/1/2009</td>
<td>6/30/2010</td>
<td>44.90</td>
<td>All</td>
<td>Union (Hourly)</td>
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<tr>
<td>FIXED</td>
<td>7/1/2009</td>
<td>6/30/2010</td>
<td>9.00</td>
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<tr>
<td>FIXED</td>
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<td>6/30/2010</td>
<td>27.00</td>
<td>All</td>
<td>Post Docs</td>
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<td>FIXED</td>
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<td>6/30/2011</td>
<td>28.40</td>
<td>All</td>
<td>Faculty</td>
</tr>
<tr>
<td>FIXED</td>
<td>7/1/2010</td>
<td>6/30/2011</td>
<td>44.50</td>
<td>All</td>
<td>Exempt</td>
</tr>
<tr>
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<td>6/30/2011</td>
<td>57.40</td>
<td>All</td>
<td>Union (Non-Exempt)</td>
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<td>6/30/2011</td>
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<td>All</td>
<td>Union (Hourly)</td>
</tr>
<tr>
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<td>6/30/2011</td>
<td>10.30</td>
<td>All</td>
<td>Temporary</td>
</tr>
<tr>
<td>FIXED</td>
<td>7/1/2010</td>
<td>6/30/2011</td>
<td>26.50</td>
<td>All</td>
<td>Post Docs</td>
</tr>
<tr>
<td>PROV.</td>
<td>7/1/2011</td>
<td>Until</td>
<td>amended</td>
<td></td>
<td>Use the same rates and conditions as those cited for the fiscal year ending June 30, 2011.</td>
</tr>
</tbody>
</table>

** DESCRIPTION OF FRINGE BENEFITS RATE BASE:
For the Exempt employee category and the Non-Exempt Unionized employee category: Salaries and wages excluding vacation leave pay.

For all other employee categories: 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 for the costs of these paid absences are not made.

Effective July 1, 2007, the following Treatment of Paid Absences is applicable to the Exempt employee category and the Non-Exempt Unionized employee category:

Treatment of Paid Absences: The costs of vacation leave pay are included in the organization's fringe benefit rate and not included in the direct cost of salaries and wages. Claims for direct salaries and wages must exclude those amounts paid or accrued to employees for periods when they are on vacation leave.

Sick leave, holiday 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 for the costs of these paid absences are not made.

1. The rates in this agreement have been negotiated to reflect the administrative cap provisions to CWA Circular A-21 published by the Office of Management and Budget on May 8, 1996. No rate, other than the Primate Center rates, affecting the institution's fiscal periods beginning on or after October 1, 1991 contains total administrative cost components in excess of that 26 percent cap.
2. Equipment means an article of nonexpendable, tangible personal property having a useful life of more than one year, and an acquisition cost of $5,000 or more per unit.

3. Activities Performed Partly-On, Partly-Off Campus: The University uses the rate applicable to the location where the preponderance of the time and effort will be expended. Accordingly, each contract or grant is assigned only one indirect cost rate.

4. The following rates are applicable to research under a Harvard contract or grant conducted at hospitals or medical facilities not affiliated with Harvard for overhead reimbursement. Typically, but not always, these hospitals are VA or State institutions:

<table>
<thead>
<tr>
<th>TYPE</th>
<th>FROM</th>
<th>TO</th>
<th>RATE</th>
<th>BASE</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRED.</td>
<td>07-01-06</td>
<td>06-30-10</td>
<td>28.7%</td>
<td>MTDC as in Sec. 1</td>
</tr>
<tr>
<td>PROV.</td>
<td>07-01-10</td>
<td>Until Amended</td>
<td>Use same rate as stated for FYE 06-30-10</td>
<td></td>
</tr>
</tbody>
</table>

5. The Off-Campus rates apply to effort conducted on premises not owned or leased by the University at locations sufficiently far removed from the campus to prohibit the normal use of University facilities and services.

6. Fringe Benefits: The University distributes fringe benefit costs to its departments and sponsored activities (including Federal programs) on the basis of annual rates applied to direct salaries and wages in lieu of individual direct charges. Over or under distribution of fringe benefit costs are carried forward in estimating future rates.

Included in the fringe benefit rates are: Pension, University Health Services, FICA, Health and Dental Plans, Worker's Compensation, Unemployment Compensation, Parking, Tuition Assistance (Employee Only), Life Insurance, and Disability Insurance.

In addition, for the Exempt employee category and the Non-Exempt Unionized employee category the fringe benefit rates include accrued vacation leave effective July 1, 2007.

The approved fringe benefit rates applicable to extra compensation are as follows:

Extra Compensation:
- Pensionable: 13.0%
- Non-Pensionable: 6.0%

This rate agreement updates fringe benefit rates only.
ORGANIZATION: Harvard Medical School Gordon Hall

AGREEMENT DATE: 04/28/2010

SECTION III: GENERAL

A. LIMITATION:
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 the facilities and administrative costs pool as finally accepted; such costs are legal obligations of the organization and are allowable under the governing cost principles; (2) The 10% costs that have been treated as facilities and administrative 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 in 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 facilities and administrative costs to direct costs. Failure to obtain approval may result in cost disallowance.

C. STEP-UP:
If a fixed rate is in this Agreement, it is based on an estimate of the costs for the period covered by the rate. Then 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 Office of Management and Budget Circular A-21 Circular, and should be applied to grants, contracts and other agreements covered by this Circular, 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. CIRCLE:
If any Federal contract, grant or other agreement reimbursing facilities and administrative costs by a rate 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 facilities and administrative costs allocable to these programs.

BY THE INSTITUTION:

Harvard Medical School Gordon Hall

[Signature]

WELEY A. BENJOW

[Institute]

CFO

[Title]

[Date]

ON BEHALF OF THE FEDERAL GOVERNMENT:

DEPARTMENT OF HEALTH AND HUMAN SERVICES

[Signature]

[Position]

Robert J. Aaronson

[Agency]

Director, Northeastern Field Office

[Title]

[Date]

[Supervisor]

Michael Leonard

[Telephone]

[Date]