COLLEGES AND UNIVERSITIES RATE AGREEMENT

EIN: 1042103580CS
DATE: 06/02/2011
ORGANIZATION: Harvard Medical School Gordon Hall
FILING REF.: The preceding
25 Shattuck Street, #407A
agreement was dated
Boston, MA 02115-
01/13/2011

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>PRSD. (PREDETERMINED)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EFFECTIVE PERIOD</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TYPE</td>
<td>FROM</td>
<td>TO</td>
<td>RATE(%) LOCATION</td>
<td>APPLICABLE TO</td>
</tr>
<tr>
<td>PRED.</td>
<td>07/01/2010</td>
<td>06/30/2011</td>
<td>69.50 On-Campus</td>
<td>Research</td>
</tr>
<tr>
<td>PRED.</td>
<td>07/01/2011</td>
<td>06/30/2013</td>
<td>69.00 On-Campus</td>
<td>Research</td>
</tr>
<tr>
<td>PRED.</td>
<td>07/01/2013</td>
<td>06/30/2015</td>
<td>69.50 On-Campus</td>
<td>Research</td>
</tr>
<tr>
<td>PRED.</td>
<td>07/01/2010</td>
<td>06/30/2015</td>
<td>39.00 On-Campus</td>
<td>Other Spons. Act.</td>
</tr>
<tr>
<td>PRED.</td>
<td>07/01/2010</td>
<td>06/30/2015</td>
<td>26.00 Off-Campus</td>
<td>All Programs</td>
</tr>
<tr>
<td>PRED.</td>
<td>07/01/2010</td>
<td>06/30/2015</td>
<td>75.00 Primate Ctr.</td>
<td>Research</td>
</tr>
<tr>
<td>PRED.</td>
<td>07/01/2010</td>
<td>06/30/2015</td>
<td>32.00 Primate Ctr.</td>
<td>CORE Grant</td>
</tr>
<tr>
<td>PRED.</td>
<td>07/01/2010</td>
<td>06/30/2015</td>
<td>99.00 Primate Ctr.</td>
<td>Non-Federal Research</td>
</tr>
</tbody>
</table>
Use the same rates and conditions as those cited for the fiscal year ending June 30, 2015.

* Table

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).
**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>7/1/2010</td>
<td>6/30/2011</td>
<td>26.40</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>
<td>FIXED</td>
<td>7/1/2010</td>
<td>6/30/2011</td>
<td>57.40</td>
<td>All</td>
<td>Union (Non-Exempt)</td>
</tr>
<tr>
<td>FIXED</td>
<td>7/1/2010</td>
<td>6/30/2011</td>
<td>47.20</td>
<td>All</td>
<td>Union (Hourly)</td>
</tr>
<tr>
<td>FIXED</td>
<td>7/1/2010</td>
<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>FIXED</td>
<td>7/1/2011</td>
<td>6/30/2012</td>
<td>27.70</td>
<td>All</td>
<td>Faculty</td>
</tr>
<tr>
<td>FIXED</td>
<td>7/1/2011</td>
<td>6/30/2012</td>
<td>44.30</td>
<td>All</td>
<td>Exempt</td>
</tr>
<tr>
<td>FIXED</td>
<td>7/1/2011</td>
<td>6/30/2012</td>
<td>56.50</td>
<td>All</td>
<td>Union (Non-Exempt)</td>
</tr>
<tr>
<td>FIXED</td>
<td>7/1/2011</td>
<td>6/30/2012</td>
<td>46.60</td>
<td>All</td>
<td>Union (Hourly)</td>
</tr>
<tr>
<td>FIXED</td>
<td>7/1/2011</td>
<td>6/30/2012</td>
<td>10.40</td>
<td>All</td>
<td>Temporary</td>
</tr>
<tr>
<td>FIXED</td>
<td>7/1/2011</td>
<td>6/30/2012</td>
<td>25.30</td>
<td>All</td>
<td>Post Docs</td>
</tr>
<tr>
<td>FIXED</td>
<td>7/1/2011</td>
<td>6/30/2012</td>
<td>18.80</td>
<td>All</td>
<td>Teach. Asst.</td>
</tr>
<tr>
<td>PROV.</td>
<td>7/1/2012</td>
<td>Until amended</td>
<td></td>
<td></td>
<td>Use the same rates and conditions as those cited for the fiscal year ending June 30, 2012.</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 OMB 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>PROV</td>
<td>07-01-15</td>
<td>Until Amended</td>
<td>26.7%</td>
<td>MTDC as in Sec. I</td>
</tr>
<tr>
<td>PROV</td>
<td>07-01-15</td>
<td>FYE 06-30-15</td>
<td>26.7%</td>
<td>Use same rate as stated for</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: 15.0%
   Non-Pensionable: 8.0%
ORGANIZATION: Harvard Medical School Gordon Hall

AGREEMENT DATE: 06/02/2011

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 facilities and administrative cost pools 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 facilities and administrative costs are not claimed as direct costs; (3) similar types of costs have been included in standard 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 to direct. Failure to obtain approval may result in cost disallowance.

C. EFFECTIVE DATE:
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 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 timely notification of the Agreement.

E. OTHER:
If any Federal contract, grant or other agreement is reimbursing facilities and administrative costs by a method other than the approved rate(s) in this Agreement, the organization should (1) credit such costs to the affected program, 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]

[Position]

[Name]

[Title]

[Date]

ON BEHALF OF THE FEDERAL GOVERNMENT:

DEPARTMENT OF HEALTH AND HUMAN SERVICES

[Signature]

[Position]

Robert L. Aaronson

[Name]

[Title]

[Date]

[SSR REPRESENTATIVE:]

Michael Leonard

[Telephone:]

(212) 364-2068
June 2, 2011

Mr. Wes Benbow  
Associate Dean for Finance and Chief Financial Officer  
Harvard Medical School, Gordon Hall  
25 Shattuck Street, #407A  
Boston, MA 02115

Dear Mr. Benbow:

A negotiation agreement is being faxed to you for signature. This agreement reflects an understanding reached between your institution and a member of my staff concerning the rates or amounts that may be used to support your claim for costs on grants and contracts with the Federal Government. The agreement must be signed by a duly authorized representative of your institution and faxed to me; retain a copy for your file. Our fax number is (212) 264-5478. We will reproduce and distribute the agreement to awarding agencies of the Federal Government for their use.

Requirements for adjustments to costs claimed under Federal Grants and Contracts resulting from this negotiation are dependent upon the type of rate contained in the negotiation agreement. Information relating to these requirements is enclosed.

As a consideration of this agreement, the following conditions were agreed to:

The following accrued vacation time rates are included in the published fringe benefit rates for fiscal year ending June 30, 2012:

<table>
<thead>
<tr>
<th>Category</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exempt Staff</td>
<td>10.3%</td>
</tr>
<tr>
<td>Unionized Non-Exempt Staff</td>
<td>9.9%</td>
</tr>
</tbody>
</table>

A proposal encompassing all activities of your institution together with the required supporting information must be submitted to my office at the address shown on page 2 for each fiscal year your institution claims costs under grants and contracts awarded by the Federal Government. This proposal is due within six months after the close of your fiscal year. Therefore, a proposal for fiscal year ending June 30, 2014 will be due in my office not later than December 31, 2014. The proposal will be used to establish rates/amounts for the fiscal year subsequent to the last period covered by an approved final, fixed, or predetermined rate(s). Failure to submit a timely proposal will be interpreted as a forfeiture of reimbursement for indirect costs.
Therefore, unless a proposal is received by December 31, 2014, future awards made by the Department of Health and Human Services will be for direct costs only and will not provide for the recovery of costs contained in this agreement. In addition, the costs claimed against awards already made may be subject to disallowances.

If you are unable to submit your proposal by the prescribed date, you may request an extension. This request must be submitted prior to the due date of the proposal and must contain a justification for the extension and the date the proposal will be submitted.

Your proposal and relevant correspondence should be addressed to:

Department of Health and Human Services
Division of Cost Allocation
26 Federal Plaza, Room 41-122
New York, New York 10278
(212) 264-1823

In addition, please acknowledge your concurrence with the comments and conditions cited above by signing this letter in the space provided below and FAX (212-264-5478) it to me with the enclosed negotiation agreement.

Sincerely,

Robert I. Aaronson
Director, Division of Cost Allocation

Enclosures

Concurrence: [Signature]
Name: [Name]
Title: [Title]
Date: [Date]