COLLEGES AND UNIVERSITIES RATE AGREEMENT

EIN: 1362167817A1
DATE: 05/23/2017
ORGANIZATION:
FILING REF.: The preceding
Northwestern University
agreement was dated
619 Clark Street - Room 117
05/09/2016
Evanston, IL 60208-1116

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>TYPE</th>
<th>FROM</th>
<th>TO</th>
<th>RATE (%)</th>
<th>LOCATION</th>
<th>APPLICABLE TO</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRED.</td>
<td>09/01/2015</td>
<td>08/31/2016</td>
<td>55.50</td>
<td>On Campus</td>
<td>Organized Research</td>
</tr>
<tr>
<td>PRED.</td>
<td>09/01/2015</td>
<td>08/31/2016</td>
<td>55.50</td>
<td>On Campus</td>
<td>DOD Contracts Only</td>
</tr>
<tr>
<td>PRED.</td>
<td>09/01/2016</td>
<td>08/31/2017</td>
<td>56.50</td>
<td>On Campus</td>
<td>Organized Research</td>
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<td>PRED.</td>
<td>09/01/2016</td>
<td>08/31/2017</td>
<td>57.50</td>
<td>On Campus</td>
<td>DOD Contracts Only</td>
</tr>
<tr>
<td>PRED.</td>
<td>09/01/2015</td>
<td>08/31/2017</td>
<td>26.00</td>
<td>Off Campus</td>
<td>All Programs</td>
</tr>
<tr>
<td>PRED.</td>
<td>09/01/2015</td>
<td>08/31/2017</td>
<td>51.00</td>
<td>On Campus</td>
<td>Instruction</td>
</tr>
<tr>
<td>PRED.</td>
<td>09/01/2015</td>
<td>08/31/2017</td>
<td>36.00</td>
<td>On Campus</td>
<td>Other Sponsored Activities</td>
</tr>
<tr>
<td>PROV.</td>
<td>09/01/2017</td>
<td>Until Amended</td>
<td>58.00</td>
<td>On Campus</td>
<td>Organized Research</td>
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<tr>
<td>PROV.</td>
<td>09/01/2017</td>
<td>Until Amended</td>
<td>59.00</td>
<td>On Campus</td>
<td>DOD Contracts Only</td>
</tr>
<tr>
<td>TYPE</td>
<td>FROM</td>
<td>TO</td>
<td>RATE(%)</td>
<td>LOCATION</td>
<td>APPLICABLE TO</td>
</tr>
<tr>
<td>-------</td>
<td>----------------</td>
<td>---------------</td>
<td>---------</td>
<td>---------------------------</td>
<td>----------------------</td>
</tr>
<tr>
<td>PROV.</td>
<td>09/01/2017</td>
<td>Until Amended</td>
<td>Use same rates and conditions as those cited for fiscal year ending 08/31/2017</td>
<td>All Non Organized Research Activities</td>
<td></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), and telecommunication and networking specialized service center charges.
ORGANIZATION: Northwestern University  
AGREEMENT DATE: 5/23/2017

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>9/1/2016</td>
<td>8/31/2017</td>
<td>27.20</td>
<td>All</td>
<td>Non Federal Programs</td>
</tr>
<tr>
<td>FIXED</td>
<td>9/1/2016</td>
<td>8/31/2017</td>
<td>23.60</td>
<td>All</td>
<td>Federal Programs</td>
</tr>
<tr>
<td>FIXED</td>
<td>9/1/2016</td>
<td>8/31/2017</td>
<td>6.40</td>
<td>All</td>
<td>Statutory</td>
</tr>
<tr>
<td>FIXED</td>
<td>9/1/2016</td>
<td>8/31/2017</td>
<td>2.60</td>
<td>All</td>
<td>Grad School Stu. Rate</td>
</tr>
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<td>FIXED</td>
<td>9/1/2017</td>
<td>8/31/2018</td>
<td>27.40</td>
<td>All</td>
<td>Non Federal Programs</td>
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<tr>
<td>FIXED</td>
<td>9/1/2017</td>
<td>8/31/2018</td>
<td>25.70</td>
<td>All</td>
<td>Federal Programs</td>
</tr>
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<td>FIXED</td>
<td>9/1/2017</td>
<td>8/31/2018</td>
<td>6.60</td>
<td>All</td>
<td>Statutory</td>
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<tr>
<td>FIXED</td>
<td>9/1/2017</td>
<td>8/31/2018</td>
<td>2.80</td>
<td>All</td>
<td>Grad School Stu. Rate</td>
</tr>
<tr>
<td>PROV.</td>
<td>9/1/2018</td>
<td>8/31/2021</td>
<td></td>
<td></td>
<td>Use same rates and conditions as those cited for fiscal year ending August 31, 2018.</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.

OFF-CAMPUS DEFINITION: For all activities performed in facilities not owned by the institution and to which rent is directly allocated to the project(s), the off-campus rate will apply. Actual costs will be apportioned between on-campus and off-campus components. Each portion will bear the appropriate rate.

Equipment Definition -
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.

FRINGE BENEFITS:

FICA
Disability Insurance
Life Insurance
Health Insurance
Dental Insurance
Child Care Assistance
Extended Sick Leave
Group Travel Insurance
Condolence Payments

Retirement
Worker's Compensation
Unemployment Insurance
Tuition Remission
Benefits' Administration
Lump Sum Separation Payments
Employee Assistance Program
FSA & HSA Match

As of 09/01/01 Telecommunications and Networking and the Animal Care Facility are specialized service centers.

Your next fringe benefit proposal based on actual costs for the fiscal year ending 08/31/17 is due in this office on 02/28/18. Your next indirect cost proposal based on actual costs for the fiscal year ending 08/31/17 is due in this office on 02/28/18.
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 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 facilities and administrative to direct. Failure to obtain approval may result in court 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 facilities and administrative 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 facilities and administrative costs allocable to these programs.

BY THE INSTITUTION:
Northwestern University

[Signature]
Ingrid S. Stafford

(NAME)
Vice President for Financial Operations
(TITLE)

(DATE) June 1, 2017

ON BEHALF OF THE FEDERAL GOVERNMENT:

DEPARTMENT OF HEALTH AND HUMAN SERVICES

[Agency]
Arif M. Karim - A

(SIGNATURE)
Arif Karim
(NAME)
Director, Cost Allocation Services
(TITLE)

(DATE) 5/23/2017

HHS REPRESENTATIVE: Matthew Dito
Telephone: (214) 767-3261