COLLEGES AND UNIVERSITIES RATE AGREEMENT

EIN: 1316025986A1
ORGANIZATION:
Ohio State University
Ohio State University Research Foundation
901 Woody Hayes Drive
2020 Blankenship Hall
Columbus, OH 43210-4016

DATE: 09/21/2012
FILING REF.: The preceding agreement was dated 05/22/2012

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: FIXED</th>
<th>FINAL</th>
<th>PROV. (PROVISIONAL)</th>
<th>PRED. (PREDETERMINED)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EFFECTIVE PERIOD</td>
<td>RATE(%) LOCATIONS</td>
<td>APPLICABLE TO</td>
<td></td>
</tr>
<tr>
<td>PRED. 07/01/2012</td>
<td>06/30/2013</td>
<td>52.50 On Campus</td>
<td>Organized Research</td>
</tr>
<tr>
<td>PRED. 07/01/2013</td>
<td>06/30/2014</td>
<td>53.50 On Campus</td>
<td>Organized Research</td>
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<td>PRED. 07/01/2014</td>
<td>06/30/2016</td>
<td>54.00 On Campus</td>
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</tr>
<tr>
<td>PRED. 07/01/2012</td>
<td>06/30/2016</td>
<td>52.00 On Campus</td>
<td>Instruction</td>
</tr>
<tr>
<td>PRED. 07/01/2012</td>
<td>06/30/2016</td>
<td>38.00 On Campus</td>
<td>Other Sponsored Activities</td>
</tr>
<tr>
<td>PRED. 07/01/2012</td>
<td>06/30/2016</td>
<td>26.00 Off Campus</td>
<td>All Programs</td>
</tr>
</tbody>
</table>
| PROV. 07/01/2016 | Until Amended | "Use same rates and conditions as those cited for FYE 6/30/16."

*BASE
Modified total direct costs, consisting of all salaries and wages, fringe benefits, materials, supplies, services, travel and subgrants and subcontracts up to the first $25,000 of each subgrant or subcontract (regardless of the period covered by the subgrant or subcontract). Modified total direct costs shall exclude equipment, capital expenditures, charges for patient care, student tuition remission, rental costs of off-site facilities, scholarships, and fellowships as well as the portion of each subgrant and subcontract in excess of $25,000.
ORGANIZATION: Ohio State University Ohio State University
Research Foundation
AGREEMENT DATE: 9/21/2012

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>
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<tbody>
<tr>
<td>FIXED</td>
<td>7/1/2011</td>
<td>6/30/2012</td>
<td>28.00</td>
<td>All</td>
<td>Faculty</td>
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<td>FIXED</td>
<td>7/1/2011</td>
<td>6/30/2012</td>
<td>36.70</td>
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<td>Admin. &amp; Professional</td>
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<td>FIXED</td>
<td>7/1/2011</td>
<td>6/30/2012</td>
<td>46.50</td>
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<td>Classified Civil Ser</td>
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<td>FIXED</td>
<td>7/1/2011</td>
<td>6/30/2012</td>
<td>14.60</td>
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<td>Non-Student Specials</td>
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<tr>
<td>FIXED</td>
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<td>6/30/2012</td>
<td>4.40</td>
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<td>Students</td>
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<td>Faculty</td>
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<td>6/30/2013</td>
<td>36.10</td>
<td>All</td>
<td>Admin &amp; Professional</td>
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<tr>
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<td>45.30</td>
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<td>6/30/2013</td>
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<td>All</td>
<td>Non-Student Specials</td>
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<td>7/1/2012</td>
<td>6/30/2013</td>
<td>10.00</td>
<td>All</td>
<td>Students</td>
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<tr>
<td>PROV.</td>
<td>7/1/2012</td>
<td>Until</td>
<td></td>
<td></td>
<td>&quot;Use same rates and conditions as cited for FYE 6/30/13.&quot;</td>
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</table>

** DESCRIPTION OF FRINGE BENEFITS RATE BASE:
Salaries and wages.

The fringe benefit rates are calculated using the sponsored program salary and wage totals instead of the University salary and wage totals.
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. Grants or contracts will not be subject to more than one F&A cost rate. If more than 50% of a project is performed off-campus, the off-campus rate will apply to the entire project.

Equipment Definition - Equipment means an article of non expendable, 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:

Retirement
Worker's Compensation
Health Insurance
Medicare
Employee Tuition Remission
Terminating Employees Vacation & Sick Leave

Disability Insurance
Life Insurance
Dental Insurance
Employee Vision
ORGANIZATION: Ohio State University Ohio State University
Research Foundation

AGREEMENT DATE: 9/21/2012

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 agreed; such costs are legal obligations of the organization and are allowable under the governing cost principles; (2) The rates are based on the 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 cost disallowance.

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 the rate(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, 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 on 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 program(s), and (2) apply the approved rate(s) to the appropriate base to identify the proper amount of facilities and administrative costs allocable to those programs.

BY THE INSTITUTION:
Ohio State University Ohio State University Research Foundation

[Signature]
Geoffrey S. Chatas
Name: Sr VP for Business & Finance and CFO
Title:
Date: 10-12-12

ON BEHALF OF THE FEDERAL GOVERNMENT:

DEPARTMENT OF HEALTH AND HUMAN SERVICES

[Signature]
Arif Karim
Name: Director, Central States Field Office
Title:
Date: 9/21/11

NHS REPRESENTATIVE: Ernest Kinneer
Telephone: (214) 767-3261

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COMPONENTS OF PUBLISHED F&A COST RATE

INSTITUTION: Ohio State University

FY COVERED BY RATE: JULY 1, 2012 through JUNE 30, 2016

APPLICABLE TO: ORGANIZED RESEARCH

<table>
<thead>
<tr>
<th>RATE COMPONENT</th>
<th>FY2013 ON CAMPUS</th>
<th>FY2014 ON CAMPUS</th>
<th>FY2015 ON CAMPUS</th>
<th>FY2016 ON CAMPUS</th>
<th>OFF CAMPUS</th>
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<tr>
<td>Interest</td>
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<tr>
<td>Operation &amp; Maintenance</td>
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<td>Library</td>
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<td>53.5</td>
<td>54.0</td>
<td>54.0</td>
<td>26.0</td>
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</tbody>
</table>

CONCURRENCE:

Ohio State University
(Institution)

Geoffrey S. Chatas
(Name)

Sr VP for Business & Finance and CFO
(Title)

10-12-12
(Date)