NEGOTIATION AGREEMENT

INSTITUTION: CALIFORNIA INSTITUTE OF TECHNOLOGY
PASADENA, CALIFORNIA 91125

The Facilities and Administration cost rates and Staff Benefit rates contained herein are for use on grants, contracts and/or other agreements issued or awarded to the California Institute of Technology by all Federal Agencies of the United States of America, in accordance with the cost principles and provisions mandated by 2 CFR 220 (formerly OMB Circular A-21). These rates shall be used for forward pricing and billing purposes at the California Institute of Technology for Fiscal Years (FY’s) 2009 and 2010. This rate agreement supersedes all previous rate agreements or determinations for FY 2009 and 2010.

SECTION I: RATES-TYPE: FIXED AND CARRY-FORWARD PROVISIONS (FIXED)

FACILITIES AND ADMINISTRATION RATE (Indirect Cost):

<table>
<thead>
<tr>
<th>Type</th>
<th>From</th>
<th>To</th>
<th>Rate</th>
<th>Base</th>
<th>Location</th>
<th>Applicable To</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixed</td>
<td>10/1/08</td>
<td>9/30/09</td>
<td>60.5%</td>
<td>(a)</td>
<td>On Campus</td>
<td>Organized Research (except JPL)</td>
</tr>
<tr>
<td>Fixed</td>
<td>10/1/08</td>
<td>9/30/09</td>
<td>26.0%</td>
<td>(a)</td>
<td>Off Campus</td>
<td>Organized Research (except JPL)</td>
</tr>
<tr>
<td>Fixed</td>
<td>10/1/09</td>
<td>9/30/10</td>
<td>62.0%</td>
<td>(a)</td>
<td>On Campus</td>
<td>Organized Research (except JPL)</td>
</tr>
<tr>
<td>Fixed</td>
<td>10/1/09</td>
<td>9/30/10</td>
<td>25.8%</td>
<td>(a)</td>
<td>Off Campus</td>
<td>Organized Research (except JPL)</td>
</tr>
</tbody>
</table>

STAFF BENEFIT RATE:

<table>
<thead>
<tr>
<th>Type</th>
<th>From</th>
<th>To</th>
<th>Rate</th>
<th>Base</th>
<th>Location</th>
<th>Applicable To</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixed</td>
<td>10/1/08</td>
<td>9/30/09</td>
<td>25.0%</td>
<td>(b)</td>
<td>All</td>
<td>Organized Research (except JPL)</td>
</tr>
</tbody>
</table>
DISTRIBUTION BASES:

(a) Modified Total Direct Cost (MTDC), as defined in 2 CFR 220, consisting of all salaries and wages, fringe benefits, materials and 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). Equipment (defined as having a useful life of two years and an acquisition cost of $5000 or more per unit), capital expenditures, charges for patient care and tuition remission, rental costs, scholarships, and fellowships as well as the portion of each subgrant and subcontract in excess of $25,000 is excluded.

(b) Total direct salaries and wages of faculty, staff (excluded graduate assistants) including vacation, holiday, and sick leave. (Leave consisting of accrued paid leave for salary and hourly employees and actual paid leave for monthly employees.)

SECTION II - GENERAL TERMS AND CONDITIONS

A. LIMITATIONS: Use of the rates set forth under Section I is subject to any statutory or administrative limitations, and is applicable to a given grant, contract or other agreement only to the extent that funds are available and consistent with any and all limitations of cost clauses or provisions, if any, contained therein. Acceptance of the rates agreed to herein is predicated upon all the following conditions: (1) that no costs other than those incurred by the grantee/contractor were included in the indirect cost pool as finally accepted and that all such costs are legal obligations of the grantee/contractor and allowable under governing cost principles; (2) that the same costs that have been treated as indirect costs are not claimed as direct costs; (3) that similar types of costs have been accorded consistent accounting treatment; and (4) that the information provided by the contractor/grantee, which was used as the basis for the acceptance of the rates agreed to herein and expressly relied upon by the Government in negotiating and accepting the said rates, is not subsequently found to be materially incomplete or inaccurate.

B. ACCOUNTING CHANGES: The rates set forth in Section I of this agreement are based on the accounting system in effect at the time this agreement was negotiated. Changes to the method(s) of accounting for costs which affects the amount of reimbursement resulting from the use of these rates require the written approval of the authorized representative of the cognizant negotiating agency for the Government prior to implementation of any such changes. 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 such approval may result in subsequent cost disallowances.

C. FIXED RATES AND CARRY-FORWARD PROVISIONS: The rates set forth in Section I of this agreement are based on estimates of the costs and proposed accounting methodologies for FY’s 2009 and 2010. When actual costs for FY’s 2009 and 2010 are determined, adjustments will be applied to a subsequent rate negotiation to recognize the difference between the estimated costs used to establish the fixed rates and carry-forward provisions and the negotiated actual costs.
D. CARRY-FORWARDS: The rates set forth in Section I are inclusive of the below carry-forward (CFW) amounts, representing the estimated balance of the FY 2006 carry-forward amounts, and estimated FY 2007 carry-forward amounts. (Note: ( ) denotes over-recovery.)

<table>
<thead>
<tr>
<th></th>
<th>Organized Research</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>On Campus</td>
<td>Off Campus</td>
<td>Staff Benefits</td>
<td></td>
</tr>
<tr>
<td><strong>FY 2009</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Balance of FY 2006 CFW</td>
<td>($386,899)</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Estimated FY 2007 CFW</td>
<td>($1,508,264)</td>
<td>-</td>
<td>($2,130,193)</td>
<td></td>
</tr>
<tr>
<td><strong>FY 2010</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Balance of FY 2006 CFW</td>
<td>-</td>
<td>($25,694)</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>Estimated FY 2007 CFW</td>
<td>($1,508,264)</td>
<td>-</td>
<td>n/a</td>
<td></td>
</tr>
</tbody>
</table>

Upon final negotiation of the 2006 and 2007 carry-forward amounts, any differences between the final negotiated and estimated carry-forward amounts will be liquidated in a future rate negotiation.

E. USE BY OTHER FEDERAL AGENCIES: The rates set forth in Section I hereof were negotiated in accordance with and under the authority set forth in 2 CFR 220. Accordingly, such rates shall be applied to the extent provided in such regulations to grants and contracts to which 2 CFR 220 is applicable, subject to any limitations in part A of this section. Copies of this document may be provided by either party to other Federal agencies which have or intend to issue or award grants and contracts using these rates or to otherwise provide such agencies with documentary notice of this agreement and its terms and conditions.

F. DFARS WAIVER: Signature of this agreement by the authorized representative of California Institute of Technology and the Government acknowledges and affirms the Institute’s request to waive the prohibition contained in DFARS 231.303(1) and the Government’s exercise of its discretion contained in DFARS 231.303(2) to waive the prohibition in DFARS 231.303(1). The waiver request by California Institute of Technology is made to simplify the Institute’s overall management of DOD cost reimbursements under DOD contracts.

G. The purpose of this agreement is to establish fixed F&A rates for the period October 1, 2008 through September 30, 2010, and fixed Staff Benefit rates for the period October 1, 2008 through September 30, 2009. The establishment of these rates by the Government, based on the accounting system and allocation methodologies in effect at the time this rate agreement is signed, does not represent an agreement that these systems and methodologies are accepted for fiscal years 2009 and 2010, or for any subsequent year’s rate negotiations.
The undersigned hereby declare that the terms of this document have been completely read and are fully understood and voluntarily accepted.

The individuals executing this agreement are authorized to execute for and on behalf of the parties for whom they sign and do so as their free and voluntary act.

FOR THE CALIFORNIA INSTITUTE
OF TECHNOLOGY:

Sharon E. Patterson
Associate Vice President for Finance

10/2/08
Date

FOR THE U.S. GOVERNMENT:

Linda B. Shipp
Contracting Officer

10/2/08
Date

For information concerning this agreement contact:

Linda B. Shipp (linda.shipp@navy.mil) (703) 696-8559
Office of Naval Research, Indirect Cost Branch (ONR 242, Room 368)
875 North Randolph Street, Arlington, VA 22203
INDIVIDUAL RATE COMPONENTS

Institution: California Institute of Technology

Rate is Applicable to: Organized Research

Type of Rate: Fixed and Carry-Forward Provisions

<table>
<thead>
<tr>
<th>RATE COMPONENTS</th>
<th>FY 2009</th>
<th>FY 2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Negotiation Base MTDC (000's)</td>
<td>$135,517</td>
<td>$141,616</td>
</tr>
<tr>
<td></td>
<td>$10,357</td>
<td>$10,823</td>
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</table>

1. ADMINISTRATIVE
   A. G&A                                      13.60%  13.60%  0.00%
   B. DA                                      6.90%   6.90%   0.00%
   C. DA Allowance                           3.60%   3.60%   0.00%
   B. SPA                                    3.15%   3.15%   0.00%
   D. STUDENT SERVICES                       1.80%   1.80%   0.00%
   E. Administrative Cap Adjustment          (3.05%) (3.05%) 26.00% 26.00%

Subtotal (should not exceed 26%)            26.00% 26.00% 26.00% 26.00%

2. BUILDING INTEREST                       2.07%   2.30%

3. DEPRECIATION
   A. Building Depreciation                  7.93%   8.30%
   B. Equipment Depreciation                 3.46%   3.55%
   C. Optical equipment Depreciation         2.11%   2.02%

4. O&M                                      16.18% 16.75%

5. LIBRARY                                  2.80%   2.80%

6. Utility Cost Adjustment (UCA)            1.30%   1.30%

7. CARRY-FORWARDS                           (1.40%) * (1.07%) ** (0.20%) ***

8. ROUNGING                                 0.05%   0.05%

TOTAL                                      60.50% 26.0% 62.00% 25.8%

*Represents estimated FY06 remaining over-recovery of $386,899 and FY07 estimated over-recovery of $1,508,264

**Represents estimated FY07 over-recovery of $1,508,264

***Represents estimated remaining balance of FY06 over-recovery of $25,694

FOR CALIFORNIA INSTITUTE OF TECHNOLOGY:

Sharon E. Patterson
Associate Vice President for Finance and Treasurer

FOR THE GOVERNMENT:

Linda B. Shipp
Contracting Officer

Date: 10/2/08

Date: 10/2/08

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INDIVIDUAL RATE COMPONENTS

Institution: California Institute of Technology    FY Covered by Rate: 2009

Rate is Applicable to: Staff Benefits

Type of Rate: Fixed and Carry-Forward Provisions

Negotiation Base: $242,644,221 Salaries & Wages

<table>
<thead>
<tr>
<th></th>
<th>Rate</th>
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<tbody>
<tr>
<td>Staff Benefits Pool</td>
<td>25.87%</td>
</tr>
<tr>
<td>Estimated FY 2007 over-recovery of $2,130,193</td>
<td>(0.88%)</td>
</tr>
<tr>
<td>Rounding</td>
<td>0.01%</td>
</tr>
<tr>
<td>Net Rate</td>
<td>25.00%</td>
</tr>
</tbody>
</table>

FOR CALIFORNIA INSTITUTE OF TECHNOLOGY:

Sharon E. Patterson
Associate Vice President for Finance and Treasurer

10/2/08 Date

FOR THE GOVERNMENT:

Linda B. Shipp
Contracting Officer

10-2-08 Date

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