August 21, 2009

Dear Dr. Zumberge,

On behalf of SIO's Ship Operations and Marine Technical Support organization, I want to welcome you in advance of your research cruise aboard R/V Robert Gordon Sproul. You are the chief scientist of record for this cruise, which has been privately funded, according to the following schedule:

<table>
<thead>
<tr>
<th>Start port:</th>
<th>San Diego, CA</th>
<th>Load days charged:</th>
<th>0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loading dates:</td>
<td>24-27 AUG 2009</td>
<td>Sea days charged:</td>
<td>0</td>
</tr>
<tr>
<td>Depart (local time):</td>
<td>2000, 28 AUG 2009</td>
<td>Offload days charged:</td>
<td>0</td>
</tr>
<tr>
<td>End port:</td>
<td>San Diego, CA</td>
<td>Private funds:</td>
<td>4</td>
</tr>
<tr>
<td>Arrival (local time):</td>
<td>NLT 2000, 01 SEP 2009</td>
<td>Total funded days:</td>
<td>4</td>
</tr>
<tr>
<td>Offload dates:</td>
<td>02 SEP 2009</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

If you require different departure or arrival times, please let us know as soon as possible so we can make proper arrangements.

Important checklists for your cruise may be found at:


If you wish to correct or add information, please contact the Ship Scheduling Office by phone at (858) 534-2840 or by email at shipsked@ucsd.edu.

Your privileges and responsibilities are defined in the Chief Scientist's Manual (see web link below). I ask that you pay particular attention to the following:

1. Your designation as chief scientist cannot be re-delegated without approval from this office.
2. As chief scientist, you are responsible for the accomplishment of scientific work on the cruise, and for the behavior of all members of the scientific party whether they normally work for you or not.
3. Alcohol and drugs are prohibited on board. No alcoholic beverages may be brought aboard without specific permission from the captain. As chief scientist, you are responsible for disseminating and enforcing these rules among the science party.
4. You are expected to cooperate with the master to enforce safety regulations aboard.
5. You are responsible for completing appropriate reports and forms; a packet containing forms will be distributed by the Ship Scheduling Office at a later date.
6. If you require radioactive material or unnatural concentrations of stable isotopes, you must secure advance permission from the SIO Isotope Committee. To learn how, contact the Ship Scheduling Office.

Lastly, I ask that you pay special attention to one final consideration. As at all UNOLS operator institutions, our Shipboard Technical Support (STS) group is funded to oversee the maintenance, calibration, scheduling, logistical assistance, and at-sea supervision of the instrumentation and shared-use equipment available to seagoing researchers. Our STS staff will do their best to maximize the success of your cruise by providing specialized knowledge, oversight of critical operations and solutions to emergent problems. However, STS technicians are
limited to 10-hour work days and cannot provide round-the-clock support for your operations, or serve as watchstanders or data processors. It is your responsibility to bring adequate numbers of trained seagoing personnel to support your operations (e.g. loading, setup and operation of your instrumentation, watchstanding, etc). Please coordinate with your scientific party and STS in order to design integrated work schedules that maximize your productivity while respecting STS personnel availability.

I wish you a pleasant and successful cruise.

Regards,

Bruce Appelgate  
Associate Director, Scripps Institution of Oceanography

cc: Captain, R/V Robert Gordon Sproul  
   Marine Superintendent  
   Manager, Shipboard Technical Support  
   Manager, Marine Personnel  
   Dr. Gerald D'Spain, Co-Principal Investigator