# Host Organization/Company Internship Questionnaire

<table>
<thead>
<tr>
<th><strong>Descriptive internship title</strong></th>
<th>Cutting-edge lab research projects under the supervision of NUS faculty</th>
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<tbody>
<tr>
<td><strong>Company/organization name</strong></td>
<td>National University of Singapore, Faculty of Science Overseas Summer Undergraduate Research Attachment Program in Science (URAPS)</td>
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<tr>
<td><strong>URAPS mission and purpose</strong></td>
<td>URAPS is aimed at providing students with a unique opportunity to work under the mentorship of outstanding NUS researchers, and experience the challenges and benefits that come from pursuing an independent research project. Students will conduct research in NUS under the supervision of a faculty member in a conducive environment with state-of-the-art laboratory facilities.</td>
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<tr>
<td><strong>Location of internship</strong></td>
<td>Selected laboratories at the Faculty of Science, National University of Singapore</td>
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<tr>
<td><strong>Students duties and responsibilities</strong></td>
<td>To engage actively in research, discussions and communications with the established scientists and members of their groups. Concrete tasks and responsibilities will depend on student’s choice of research project</td>
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<td><strong>Selection process</strong></td>
<td>Interested students should identify at least 5 potential NUS faculty members they would have interest in working with from the departments listed below and include a paragraph of their research interest in their Global Fellows statement of interest. Once recruited for the program, students will contact potential supervisors in NUS Science or NUS Medicine directly, and/or request the NUS office to suggest suitable supervisors and research labs based on their research interest(s).</td>
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<tr>
<td><strong>Ideal Majors</strong></td>
<td>Bio, Bio &amp; Stats, Bio &amp; Society, Bio Engineering: Public Global Health-focused w/lab research interests; or students from other CALS majors able to identify a research project from the list of faculty members below</td>
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<td><strong>What schedule is the student expected to work?</strong></td>
<td>Depending on the arrangement between the student and the project supervisor. Under normal circumstances, student is expected to work 8.30am to 6.00pm on Mon-Thu and 8.30am to 5.30pm on Fri.</td>
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<tr>
<td>Question</td>
<td>Answer</td>
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<td>Besides remuneration, are there any benefits that your organization will provide to the student? *</td>
<td>Students will have access to campus service and facilities like regular NUS students. In addition, medical and travel insurance will be available upon payment of the mandatory Miscellaneous Student Fees (MSFs). On campus accommodation may be arranged and there is an office to assist and advise students on the process. More information available at <a href="http://nus.edu.sg/osa/has/non-graduating/application-guide">http://nus.edu.sg/osa/has/non-graduating/application-guide</a>.</td>
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<td>What is the minimum and the maximum duration of the internship? Are there specific start and end dates?</td>
<td>At least 130 hours for 8 weeks Fellows can do internships anytime between the program dates of mid-May to beginning of August</td>
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<td>Are there any social activities at your organization that the student can participate in?</td>
<td>Immerse in the culture of Singapore through trips &amp; tours. Students will experience the fascinating culture, cuisine and sights of Singapore, and immerse themselves into the multifaceted and multicultural city, together with students from the Biodiversity Summer Program. Program participants may also participate in student activities like regular NUS students (access to gym, NUS presentations)</td>
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| Additional links or resources | **Our Faculty Members**  
Below lists the research focus and contact information of NUS faculty members:  
**Department of Biological Sciences:**  
http://www.dbs.nus.edu.sg/staff/faculty.html  
**Department of Chemistry:**  
http://www.chemistry.nus.edu.sg/people/academic_staff/by_division.htm  
**Department of Pharmacy:**  
https://pharmacy.nus.edu.sg/research-introduction/  
**Department of Statistics & Applied Probability:**  
http://www.stat.nus.edu.sg/opencms/people/peo_faculty.html  
**Department of Anatomy:**  
**Department of Biochemistry:**  
http://bch.nus.edu.sg/  
**Department of Microbiology and Immunology:**  
http://medicine.nus.edu.sg/mbio/  
**Department of Physiology:**  
http://medicine.nus.edu.sg/phys/  
**Department of Pharmacology:**  
http://medicine.nus.edu.sg/medphc/  

For general information about the program, please visit http://www.science.nus.edu.sg/undergraduate-studies/ugenh/urops-main/188-education/exchange-students/253-summer-research.
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<th>Project Title</th>
<th>NUS Supervisor</th>
<th>Department</th>
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<tr>
<td>Effects of hypoxia on the developing brain with a focus on the hippocampus.</td>
<td>Prof Charanjit KAUR</td>
<td>Anatomy</td>
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<tr>
<td>A useful bio-imaging approach to study protein delivery</td>
<td>Assoc Prof Pan Shen Quan</td>
<td>Biological Sciences</td>
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<tr>
<td>Molecular mechanisms in endocytic trafficking</td>
<td>Asst Prof Nicholas Tolwinski</td>
<td>Biological Sciences</td>
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<tr>
<td>DECODING CELLULAR AND MOLECULAR MECHANISMS OF REGENERATION IN PLANTS</td>
<td>Asst Prof XI Jian</td>
<td>Biological Sciences</td>
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<tr>
<td>A Summary of Conservation Status of Southeast Asia’s Critically Endangered Vertebrate Species</td>
<td>Dr Madhu Rao</td>
<td>Biological Sciences</td>
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<tr>
<td>Characterization of a novel serine protease, involved in the pathogenesis of a gram-positive bacterium</td>
<td>Prof Jayaraman Sivaraman</td>
<td>Biological Sciences</td>
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<tr>
<td>Recombinant expression, purification and folding of new class of acetylcholine receptor antagonists from snake venom</td>
<td>Prof R Manjunatha Kini</td>
<td>Biological Sciences</td>
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<td>Recombinant expression, purification and folding of new class of acetylcholine receptor antagonists from snake venom</td>
<td>Prof R Manjunatha Kini</td>
<td>Biological Sciences</td>
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<tr>
<td>Investigation of dengue virus by fluorescence spectroscopy and microscopy</td>
<td>Prof Thorsten WOHLAND</td>
<td>Biological Sciences</td>
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<tr>
<td>Functionalized benzimidazole-derived carbene complexes</td>
<td>Assoc Prof Huynh, Han Vinh</td>
<td>Chemistry</td>
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<tr>
<td>Functionalized triazole-derived carbene complexes</td>
<td>Assoc Prof Huynh, Han Vinh</td>
<td>Chemistry</td>
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<tr>
<td>Understanding the function of an essential membrane protein in lipid transport in Gram-negative bacteria</td>
<td>Asst Prof CHNG Shu Sin</td>
<td>Chemistry</td>
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<tr>
<td>Synthesis of Pyridine-2,6-dimine Ligands for Cobalt Catalysis</td>
<td>Asst Prof GE Shaozhong</td>
<td>Chemistry</td>
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<tr>
<td>Treatment with low concentration electrolysed water combined with levulinic acid to sanitise fresh organic lettuce</td>
<td>Asst Prof YANG Hongshun</td>
<td>Chemistry</td>
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<tr>
<td>Study of organic reactive intermediates by computational chemistry - a new approach for undergraduates</td>
<td>Dr Michael Yudistira</td>
<td>Chemistry</td>
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<tr>
<td>Accessing PC(NHC)P complexes through urea based precursors</td>
<td>Dr Rowan Drury Young</td>
<td>Chemistry</td>
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<tr>
<td>Metal-free visible-light mediated alklylation of a-oxy sp3 C-H bonds</td>
<td>Dr Wu Jie</td>
<td>Chemistry</td>
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<tr>
<td>Developing Electrocatalysts for the Reduction of CO2 to Propanol</td>
<td>Dr Yeo Boon Siang, Jason</td>
<td>Chemistry</td>
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<tr>
<td>Pd-catalyzed stereoselective cycloadditions</td>
<td>Dr Zhao Yu</td>
<td>Chemistry</td>
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<tr>
<td>Evaluating the use of emerging multimedia in an undergraduate chemistry laboratory setting</td>
<td>Mr Fung Fun Man</td>
<td>Chemistry</td>
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<td>Exploring a Flipped Assessment</td>
<td>Mr Fung Fun Man</td>
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<td>Assisting Learners in Laboratory Reporting</td>
<td>Mr Fung Fun Man</td>
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<td>Nanostructured Materials for Rapid Biological Detection: A New Approach to System Integration on Molecular Scale</td>
<td>Prof LIU Xiaogang</td>
<td>Chemistry</td>
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<td>Controlling Photon Upconversion through Lanthanide Doping</td>
<td>Prof LIU Xiaogang</td>
<td>Chemistry</td>
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<tr>
<td>Applications of Halogen Bonding to Catalysis - A Computational Study</td>
<td>Prof Wong Ming Wah, Richard</td>
<td>Chemistry</td>
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<tr>
<td>Theoretical Studies of Complex Perovskite Materials</td>
<td>Prof XU Guo Qin</td>
<td>Chemistry</td>
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<tr>
<td>Fourier series and its history</td>
<td>Assoc Prof Chua Seng Kee @ Sai Seng Kee</td>
<td>Mathematics</td>
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<tr>
<td>Burrows-Wheeler transformation and its applications</td>
<td>Assoc Prof Zhang Louxin</td>
<td>Mathematics</td>
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<tr>
<td>Efficient algorithms for the largest common subtree problem</td>
<td>Prof Louxin ZHANG</td>
<td>Mathematics</td>
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<tr>
<td>Exploring the potential of selective FGFR4 inhibitors in liver fibrosis and cancer with aberrant FGFR4 signaling</td>
<td>Assoc Prof HO Han Kiat</td>
<td>Pharmacy</td>
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<tr>
<td>Elucidation of the role of MOAP-1 in regulating stress response signaling in liver</td>
<td>Assoc Prof YU Chun Kong, Victor</td>
<td>Pharmacy</td>
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<tr>
<td>Correlations in Fermionic and Bosonic Systems</td>
<td>Assoc Prof Dagomir Kauilikowski</td>
<td>Physics</td>
</tr>
<tr>
<td>Study of tumor suppressors and microcephaly genes in Drosophila brains</td>
<td>Assoc Prof Hongyan WANG</td>
<td>Physiology</td>
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<tr>
<td>Post-translational modifications of nuclear transcriptional factors in the regulation of autophagy</td>
<td>Prof Han-Ming SHEN</td>
<td>Physiology</td>
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<tr>
<td>Investigating synaptic plasticity in the hippocampal area CA2</td>
<td>Asst Prof Sajikumar Sreedharan</td>
<td>Physiology</td>
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