

# John and Robin de Laeter Science Engagement Scholarships 2016-17

## TAFE and Tertiary Students

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### **INTRODUCTION**

The Gravity Discovery Centre (GDC) has established this scholarship to recognize the huge contribution to science education in Western Australia made by Professor John de Laeter and his wife Robin. The scholarship is designed to enable students to collaborate with scientists, educators and technicians through the auspices of the GDC.

The successful applicant will design and construct an exhibit/display/multimedia production in consultation with GDC personnel. The finished project will be permanently located at the Gravity Discovery Centre. The main purpose of the project is to communicate scientific discoveries and achievements to visitors.

### **SCHOLARSHIP ASSISTANCE**

The scholarship value is up to \$5000 for individual projects and up to \$10,000 for group projects. Costs associated with materials and construction will be provided.

The scholarship shall be awarded in two parts with 25% paid at completion of the design stage and the balance on successful completion and commissioning of the project. Support from scientists, educators and technicians will be provided in design, development and construction.

**ELIGIBILITY** - Applications are invited from students enrolled at any West Australian university or TAFE college. It would be advantageous for applicants to visit the Centre to identify potential exhibits. Also, the successful candidate(s) may need to work some days at the GDC when installing and commissioning their project. Transport to the GDC will be the responsibility of the scholarship winner.

### **SELECTION CRITERIA**

#### **The successful applicants:**

- Will have an interest in communicating science to others
- Will have high achievement in their relevant education
- Will demonstrate initiative and creativity
- Are able to work independently and as part of a group to complete tasks in a timely manner
- Will demonstrate appropriate skills and ability to plan projects and take them to a timely completion.

### **SELECTION PROCESS:**

The selection process follows the following two stages.

- Stage 1: Initial application outlining student details, experience and achievements and an outline of idea for the exhibit. (This involves completion of the application form)

- Stage 2: Following feedback and discussion students will be asked to create a project plan that includes a timeline, concept drawings and methodology. Final selection will be based on the feasibility and benefit of the proposed project.

### **PROJECT PLAN**

- If successful the student will now submit detailed working drawings including list of materials, timelines, all costs involved etc.
- At the completion of this stage the design will be evaluated by an examination committee and if approved the initial payment can be made and students can proceed with the construction of the project
- Construction, installation and commissioning of project. Final payment will be made to the student following the successful completion of this stage.

### **SOME POSSIBLE PROJECT IDEAS**

The projects below are suggestions only.

- Interactive renewable energy exhibits (wave, tidal, hydro, solar, wind power)
- Greenhouse effect exhibit
- Free-fall exhibit , incl. vacuum chamber for feather and ball drop
- Building of a 50 inch telescope for the observatory
- Robotics for above
- Software for above – (iPhone app to control?)
- Cutaway telescope showing light paths (laser beam through smoke haze)
- Ruben's Tube,
- Reflective solar image projector
- Photoelectric effect exhibit
- Acoustic telescope

**HOW TO APPLY** - Applicants are required to complete the Application Form. You are welcome to contact me to discuss ideas for projects and the planning of your application.

Warren Stannard

**warren.stannard@uwa.edu.au**

# TERTIARY/TAFE STUDENT SCHOLARSHIP APPLICATION FORM

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## **Part 1. Student details**

First name .....

Surname .....

Address .....

Email .....

Phone .....

Name of enrolled university .....

Course enrolled .....

Major discipline(s) .....

## **Part 2:**

Describe any science projects, achievements, interests and skills relevant to this scholarship

## **Part 3:**

Provide a short summary of your ideas and preferred project. (Please include diagrams if they will help communicate your idea)

**Applications must not exceed two pages in length:**

You may add attachments with supporting material such as photographs.

**Complete all three parts and return by email to Warren Stannard at the following address:**

**warren.stannard@uwa.edu.au**