

Task Description:

Funds are in support of travel and subsistence expenses for the following student:

Alessandro Francesco Fois

The main project is to measure the effects of oxygen and redox-active metals on amyloid formation kinetics. He also will be involved in the synthesis development of organometallic catalysts for incorporation into protein interiors.

Firm shall send \$3,500 month for each WB-1 VISA student for 1 month from June 30, 2007 through July 31, 2007.

Alessandro Francesco Fois

PERSONAL DETAILS

Date of Birth: 18/07/1985 **Term-time address:** Green College
E-mail: alessandro.fois@green.ox.ac.uk At the Radcliffe Observatory
Cell number: +44 7794 166884 Woodstock Road, Oxford
Home number: +44 1865 284587 OX2 6HG
Nationality: Australian United Kingdom

EDUCATION

2006 - present Candidate for **Bachelor of Medicine and Surgery (BM, BCh)** at the **University of Oxford**.

2003 - 2006 **Bachelor of Science (Hon. I, Medal)** at the **University of Sydney**
(Jan - May 2005: Completed a semester of my B. Sc. degree on student exchange at the University of California, Berkeley).
Majored in Mathematics and Chemistry, High Distinctions in all subjects.

1997-2002 Years 7-12 at **Sydney Grammar School (SGS)**.
Achieved a University Admissions Index (UAI) of 100.
Dux (Valedictorian) of Sydney Grammar School.

SCHOLARSHIPS/ ACADEMIC PRIZES AND AWARDS

2006 University Medal (U. Syd.)

2005 Summer Undergraduate Research Fellowship (California Institute of Technology).

2004 Chancellor's Committee Scholarship (for student exchange to the University of California, Berkeley).
Geoffrey Builder-AWA Prize for proficiency in practical work in Physics (U. Syd.).
Arthur Hollis Memorial Prize for Chemistry (U. Syd.).
Faculty of Science Dean's Honour List.

2003 Morehead Exhibition.
Faculty of Science Dean's Honour List.
NewSouth Scholarship offered (but declined) to the University of NSW.
Outstanding Achievement Scholarship offered (but declined) to the University of Sydney.
University of Sydney Scholarship with Merit.
Farrand Science Scholarship (U. Syd.).
Cadbury – Julius Sumner Miller Scholarship No. 1 for Physics (U. Syd.).
F.K. Barton Greek Scholarship.

2002 Senior Knox Prize - Dux (Valedictorian) of the School (12th grade at SGS).
Bronze Certificate in the Australian Mathematics Olympiad (AMO).
Certificate of Merit in the Senior Division of the University of NSW School Mathematics Competition.
Australian Students Prize (Commonwealth Government Award).
Premier's Award for All-round Excellence in the 2002 Higher School Certificate.
Cooper Scholarship No. II (awarded by Sydney University for proficiency in classics).

1997-2002 Sydney Grammar School Trustees' Scholarship.

ACADEMIC ENDEAVOURS/ RESEARCH

2005-2006 Member of the Laboratory of Advanced Catalysis for Sustainability (U. Syd.).

2005 Summer Undergraduate Research Fellowship under Prof. H. B. Gray at the California Institute of Technology.
Completed a semester on student exchange to the University of California, Berkeley.
Member of the Long Research Group (Inorganic and Solid State Chemistry) at the University of California, Berkeley.

2003 - present Faculty of Science Talented Students Program (TSP) (U. Syd.).
Chemistry Special Studies Program (U. Syd.).

2004 TSP research project with University of Sydney Theoretical Physics Department.

2003 Mathematics Special Studies Program (U. Syd.).
TSP research project with University of Sydney High Energy Physics Department.

2002 National Mathematics Summer School (NMSS).
School (non-HSC) extension course in Quantum Mechanics and Lagrangian Dynamics.

PUBLICATIONS

2006 *Catalytic Nanoreactors and Dynamic Kinetic Resolution*, Honours Thesis (U. Syd.)

Reaction System, A. F. Fois, A. F. Masters, T. Maschmeyer US Prov. PAN 60/840009, filed 25 August 2006.

Compartmentalised Nanoreactors and Dynamic Kinetic Resolutions, A. F. Fois, A. F. Masters, T. Maschmeyer, 4th Asia Pacific Conference on Catalysis, Singapore, 6-8 December, 2006.

2007 *Compartmentalised Nanoreactors and Dynamic Kinetic Resolutions*, A. F. Fois, A. F. Masters, T. Maschmeyer, IC07: Conference of the Inorganic Division (The RACI) and Inorganic and Organometallic Specialist Group (NZIC), Hobart, Australia, 4-8 February, 2007.

PRESENTATIONS

2006 *Catalytic Nanoreactors and Dynamic Kinetic Resolution*, Honours Seminar (U. Syd.)

2005 *α -Synuclein and A β : The Role of Oxygen and Metals*, Summer Undergraduate Research Fellowship Seminar (Caltech).

2004 *The Heisenberg-Euler Lagrangian*, Physics TSP presentation (U. Syd.).

2003 *Needle in a Haystack: Finding the η* , Physics TSP presentation (U. Syd.).

EMPLOYMENT/ WORK EXPERIENCE/ CASUAL WORK

2006 **First-year Chemistry Demonstrator**
I supervised first-year laboratory classes in the School of Chemistry at the University of Sydney.

2004-2006 **University of Sydney Student Ambassador**
This entailed promoting the University of Sydney at the various recruitment events it organises.

2003-2006 **Private tuition**
I tutor a number of secondary school students on a private basis in various subjects, particularly mathematics.

2004 **Supervisor in Sydney Grammar School Supervisions Scheme**
I tutored small groups of students, mainly in mathematics, as part of this tuition program at Sydney Grammar School.