

Tiago Tomaz

Fulbright Postdoctoral Scholar at UIUC

tiago_t@iinet.net.au

Summary

- Plant biochemist and physiologist
- Cereal pre-breeding focus (wheat, barley, maize)
- Proficiency in the use of genomic and post-genomic tools
- Efficient, detail-oriented, and strategic planner of projects
- Organised & systematic approach to task management
- Interests in photosynthetic metabolism and plant energy use efficiency

Specialties: Plant Biochemistry, Plant Physiology, Proteomics, Metabolomics, Molecular Biology

Experience

Visiting Postdoctoral Scholar at University of Illinois at Urbana-Champaign

January 2014 - Present (5 months)

Research Officer at Department of Agriculture and Food WA - DAFWA

December 2012 - December 2013 (1 year 1 month)

- Lead the development of an efficient colorimetric assay and FT-NIR calibration for rapid determination of water soluble carbohydrate content in field grown wheat
- Active team member in seeding, crop maintenance, field phenotyping, harvesting and post-harvesting activities at 2 wheat-belt trial sites in WA
- Participated in field based phenotyping and development of remote sensing equipment to characterise the effects of water deficit on growth of select wheat and barley varieties
- Developed field based gas exchange assay/chlorophyll fluorescence assays to determine effects of frost events on the photosynthetic capacity of select wheat and barley varieties.
- Field based phenology and physiological screening of commercial wheat and barley varieties.

Research Associate at ARC Centre of Excellence in Plant Energy Biology

March 2012 - October 2012 (8 months)

- Characterized mitochondrial TCA cycle and Vitamin C mutants in a popular C3 model plant
- Provided technical advice and supervised researchers in the use of analytical equipment and implementation of protocols for chemical and biochemical analyses
- Processed plant tissue samples for protein (LC/MS) and metabolite (GC/MS) analyses
- Performed molecular biology techniques and genetic transformation of a model plant
- Characterised transgenic plant material using protein biochemistry and plant physiology
- Performed leaf level characterisation of photosynthetic and respiratory performance
- Maintained and established plant tissue and cell cultures

- Assisted in maintenance of GC/MS and Ion Trap LC/MS
 - Maintained laboratory supplies for a lab of 20 personnel
 - Assisted in development of new methods and the establishment of new technology platforms
 - Reported experimental findings in seminars, reports and publications
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Honors and Awards

2013 Western Australian Postdoctoral Scholar

Australian-American Fulbright Commission

Commencing January 2014. To be undertaken at the University of Illinois at Urbana-Champaign, USA.

Project will investigate ozone tolerance mechanisms in maize, using post-genomic techniques and free air concentration enrichment (FACE) technology.

Projects

Reverse Genetic Analyses of Carbon Metabolism and its Linkages to Antioxidant Defence

Members:Tiago Tomaz

Extension of PhD research

New strategies for phenotyping reproductive stage frost and chilling tolerance in wheat

Members:Tiago Tomaz

GRDC project (CSP00143). Worked under the direction of PI - Dr Ben Biddulph.

Characterising water deficit and bench marking genetic diversity in wheat for key adaptive traits at Merredin, Yanco and Narrabri Managed Environment Facilities

December 2012 to Present

Members:Tiago Tomaz

GRDC project (DAW00215). Worked under the direction of PI - Dr Ben Biddulph.

Certifications

Open Water Diver

Professional Association Diving Instructors May 2010

Bronze Medallion

Royal Life Saving Society WA November 2012

Senior First Aid

Royal Life Saving Society WA December 2012

Languages

English	(Native or bilingual proficiency)
Portuguese	(Native or bilingual proficiency)
Spanish	(Professional working proficiency)

Skills & Expertise

PCR
RT-PCR
LC-MS
GC-MS
Protein Purification
SDS-PAGE
Western Blotting
Agricultural Research
FT-NIR
Cereal chemistry
Plant Tissue Culture
Molecular Biology
Plant Physiology
Biochemistry
Molecular Genetics
MALDI-TOF
Fluorometer
Spectroscopy

Education

The University of Western Australia

Doctor of Philosophy (Ph.D.), Plant Biotechnology, 2008 - 2012

Activities and Societies: • UWA Postgraduate Student Association Committee Member

- Faculty of Life & Physical Sciences Postgraduate Representative
- Postgraduate Events Coordinator
- Volunteer Undergraduate Mentor

Queenland University of Technology

Graduate Certificate, Research Commercialisation, 2010 - 2010

The University of Western Australia

Bachelor of Science (BSc), Biochemistry (Hons), Pharmacology, 2004 - 2007

Seton College

Western Australia Certificate Education (WACE), 2003

Activities and Societies: 2003 Swim Team Captain, U/16 and U/17 Champion Boy Swimming

Interests

Renewable Energy, Biofuels, Marine Ecosystems, Surfing, Kitesurfing, Scuba Diving, Stand Up Paddleboarding, Swimming, Travel, Snowboarding, Languages, Global Cuisine

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[Contact Tiago on LinkedIn](#)