Advertised: *External Website, Friday 6 November 2009*

THE UNIVERSITY OF WESTERN AUSTRALIA

Achieving International Excellence

RESEARCH ASSOCIATE (REF: 2963)
MOLECULAR MODE OF ACTION OF KARRIKINS IN PLANTS
ARC CENTRE OF EXCELLENCE IN PLANT ENERGY BIOLOGY

- 2.5 year appointment
- Salary range: Level A $51,895 - $70,424 p.a. - minimum starting salary for appointee with PhD will be $68,018 p.a.
- Closing date: Friday, 4 December 2009

The ARC Centre of Excellence in Plant Energy Biology at The University of Western Australia undertakes research in plant energy biology and related aspects of plant environment interactions, growth and development. The Centre has excellent facilities for research focused on Arabidopsis including plant growth, imaging, biochemistry and functional genomics. The University of Western Australia is one of the 'Group of Eight' top-ranked universities in Australia, and is ranked top for plant and agriculture sciences.

A postdoctoral research associate position is available to study the molecular mode of action of karrikins. Karrikins are a new family of plant growth regulators discovered in smoke with potent germination-stimulating activity in many species. We have established that both seed germination and post-germinative light-dependent responses of Arabidopsis thaliana are sensitive to karrikins, and have now identified karrikin response mutants through several genetic screens. This is an exciting, emerging research area which offers great opportunities for new discoveries and career development. This position will involve genetic mapping of karrikin response mutants, reverse genetic analysis of karrikin-responsive genes and molecular/biochemical characterisation of cloned genes. Applicants must have a PhD in plant genetics, molecular biology or related discipline. The appointee will carry out research in the Smith laboratory but will also be part of a multi-disciplinary team including chemists at UWA and plant ecologists at Kings Park Botanic Garden in Perth. This is a new and important research area which offers great opportunities for new discoveries and career development.

Perth is a vibrant city with high quality of life and outdoor recreation. Benefits include 17% superannuation and salary packaging is available. Some assistance with relocation expenses (if applicable) may be negotiated.

For further information regarding the position please contact Steven Smith by email ssmith@cyllene.uwa.edu.au.

APPLICATION DETAILS: The position description follows. Written applications quoting the reference number, personal contact details, qualifications and experience, along with contact details of three referees should be sent to Director, Human Resources, The University of Western Australia, M350, 35 Stirling Highway, Crawley WA 6009 or emailed to *jobs@uwa.edu.au* by the closing date.

Committed to recruiting, developing and retaining the highest quality staff

Also see the following references:

Flematti GR, Ghisalberti EL, Dixon KW, Trengove RD. (2004). A compound from smoke that promotes seed germination. Science. 305:977.
Nelson DC, Riseborough JA, Flematti GR, Stevens J, Ghisalberti EL, Dixon KW, Smith SM. (2009) Karrikins discovered in smoke trigger Arabidopsis seed germination by a mechanism requiring gibberellic acid synthesis and light. Plant Physiol. 149: 863-73.
Chiwocha SDS, Dixon KW, Flematti GR, Ghisalberti EL, Merritt DJ, Nelson DC, Riseborough JAM, Smith SM, Stevens JC. (2009) Karrikins: A new family of plant growth regulators in smoke. Plant Science 177: 252-256.

THE UNIVERSITY OF WESTERN AUSTRALIA

POSITION DESCRIPTION

POSITION IDENTIFICATION

Faculty:	Faculty of Life and Physical Sciences
School/Admin Department:	
Centre:	ARC Centre of Excellence Plant Energy Biology
Section:	
Position Number:	308903
Position Title:	Research Associate
Position Classification:	Level A
Supervisor Title:	Professor Steven Smith
Supervisor Position Number:	57266

ROLE STATEMENT

To conduct research to discover the molecular mode of action of the plant growth regulators, karrikins. This will involve genetic and molecular approaches using Arabidopsis thaliana, and close collaboration with members of a larger team including chemists and plant biologists.

KEY RESPONSIBILITIES

- Plan genetic approaches to discover genes involved in the perception, signaling and metabolism of karrikins.
- Conduct genetic analysis to investigate relationship of karrikin signaling to that of plant hormones and environmental signaling.
- Conduct experiments to analyse functions of proteins involved in karrikin action.
- Conduct joint experiments with chemists and biochemists to investigate metabolism and natural occurrence of karrikins.

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Position Number:	308903
Position Title:	Research Associate
Position Classification:	Level A
Supervisor Title:	Professor Steven Smith
Supervisor Position Number:	

SPECIFIC WORK CAPABILITIES: (Minimum requirements to perform the duties of the position, e.g. Certificate of Secondary Education).

- PhD in plant genetics, molecular biology or related discipline
- Research experience in genetic analysis and gene expression, preferably in Arabidopsis
- Demonstrated ability to publish and present research work of international standard
- Experience with growing, transforming, genotyping and analysing Arabidopsis plants
- Experience with measuring gene expression such as quantitative RT-PCR and microarrays
- Experience with analysis of proteins for example expressing proteins for functional studies
- Demonstrated ability to work as part of a team
- Demonstrated ability to supervise student research projects

Positions directly supervised: 0	Number of positions for which responsible: 0

POSITION APPROVALS

Signature
(Supervisor)

DATE 29 Oct. 09

Signature
(Head of School/Admin Department)

DATE 29 Oct. 09

PLEASE COMPLETE AND SUBMIT WITH YOUR APPLICATION.

PRIVACY AUTHORISATION

I _____ hereby authorise The University of Western Australia to contact the referees nominated by me below for the purpose of confirming my employment history, work skills and abilities and other information to assist in the assessment of my application for employment.

_____ _____

Signed Date

Nominated Referees

Referee Name: _____

Position: _____

Company: _____

Telephone No: _____

Email Address: _____

Referee Name: _____

Position: _____

Company: _____

Telephone No: _____

Email Address: _____

Referee Name: _____

Position: _____

Company: _____

Telephone No: _____

Email Address: _____

The University of Western Australia will treat all information obtained in a strictly confidential manner and will not release any information to any other party unless authorisation to do so has been obtained from the applicant.

HOW DID YOU FIRST HEAR ABOUT THE VACANT POSITION?
Please indicate how you heard about the position (tick one)

	Source	Code
☐	Word of mouth from UWA staff	13
☐	Professional network *(please specify)*	14
☐	Web – jobs.uwa.edu.au	10
☐	Web – seek.com.au	15
☐	Web – UniJobs.com.au	11
☐	Web – professional careers site *(please specify)*	16
☐	Web – other Please specify	20
☐	Print – West Australian Newspaper	01
☐	Print – A WA Community Newspaper	17
☐	Print – Other WA newspaper/newsletter *(please specify)*	09
☐	Print – The Australian Newspaper	02
☐	Print – Other national newspaper *(please specify)*	08
☐	Print – International newspaper *(please specify)*	07
☐	Print – Journal *(please specify)*	18
☐	Recruitment Agency *(please specify)*	12
☐	Other. Please specify	19