



**Michael A. Djordjevic,
Director**

Q: Tell us about yourself and your work?

A: Currently I am a chief investigator in the ARC Centre of Excellence for Integrative Legume Research (CILR), which involves researchers from four Universities in Australia. The Centre's research is focused on legume meristems involved in the formation of roots, shoots, and flowers with the goal of the future adaptation of chosen legumes for the Australian environment. The projects I am most responsible for focus on identifying new signals involved in long distance signaling and control of meristem proliferation, for example, those signals involved in autoregulation of nodulation (in collaboration with the Gresshoff labs at the University of Queensland). Part of this work involves direct examination of components in the xylem stream of soybean grown under conditions in which long-distance signals are known to be conducted between the root and shoot systems. In addition, I am also involved in a collaboration with Chris Parish at the John Curtin School of Medical Research at the ANU. In this research, we have identified a series of bioactive molecules in plants that are also bioactive in mammals. Perhaps one day these molecules will find wide utility in human health with potential outcomes in cancer control and cardiovascular disease.

Q: When did you first join the society?

A: I have been a member for a long time but I can't recall when it was exactly that I first joined.

Q: Which IS-MPMI Congress did you first attend?

A: After consulting my CV, I found that the first IS-MPMI Congress attended was in Ithaca, New York way back in the "dark ages" of the 1980s.

Q: What inspired you most in your career?

A: I have several interests. Plant-microbe interactions at all levels are fascinating—especially those involved in establishing symbiosis. How microbes have an intimate interaction with plants without triggering overt plant defense responses is still mysterious. Another interest is the role that flavonoids have in plant function—I have recently reignited this interest and hope to publish some interesting new findings soon. It is still amazing to me that more seems to be known about the biochemical functions of flavonoids in animal cells than in plant cells! A more recent interest is the control of stem cells in plants and how this influences plant architecture. This has come from my involvement with the CILR. Finally, the possibility of a chance discovery that has wider ramifications than the immediate field of interest is a constant source of motivation and inspiration.

Q: What is the most exciting paper you read recently?

A: The paper by Fiers et al. in *Plant Physiology* that follows on from their publication last year (Fiers et al *Plant Cell*. 17: 2542-2553, 2005) on the biological activity of the C-terminal domain of the Clv3 protein. It's refreshing to know that plants are not controlled solely by metabolite hormones!

Q: What is your favorite gene?

A: I don't have a favorite gene, but I have a favorite protein, NodC. I am still fascinated as to how this particular chitin synthase is able to generate de novo chitin chains without a molecular scaffold and to extend the chain to a limited degree of polymerization to generate Nod factor backbones.

Q: What are your favorite activities outside the lab?

A: I love traveling to foreign countries and sampling all the unique food and marveling at how different cultures look at life differently.

Q: What books are you reading these days?

A: I am halfway through the "Australian Miracle" by Thomas Barlow, which examines how innovation is and was generated in Australia and explores how this applies to the biotechnology industry here.

Q: What's your favorite vacation?

A: Ever since I went to St. Petersburg in the mid-90s, I have become a Russia-ophile. This is a spectacular must-see place where major events in history happened at every turn. Equally favorite destinations are Mexico, South East Asia, Spain, and South America. I also like snorkelling and diving at any coral reef that happens to be in the vicinity.