

## Biographical Sketch

### Michael Udvardi

Chief Scientific Officer

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### A. PROFESSIONAL PREPARATION

The Australian National University	Canberra	Biochemistry	B.Sc. 1984
The Australian National University	Canberra	Biochemistry	Ph.D. 1989
The Australian National University	Canberra	Biochem. Postdoc.	1989-1990
Washington State University	Pullman	Molec. Biol. Postdoc.	1990-1992
The Australian National University	Canberra	Molec. Biol. Postdoc.	1992-1994

### B. APPOINTMENTS

2017-present	Chief Scientific Officer, Noble Research Institute, OK
2013-2017	Director, Plant Biology Division, Samuel Roberts Noble Foundation, OK
2006-2013	Professor, Plant Biology Division, Samuel Roberts Noble Foundation, OK
1998-2006	Associate Professor, Max Planck Inst. Molecular Plant Physiology, Germany
1994-1998	Lecturer-Senior Lecturer, The Australian National University, Australia

### C. PRODUCTS

#### (i) Most Closely Related to the Proposed Project

1. Kang, Y., Sakiroglu, M., Krom, N., Stanton-Geddes, J., Wang, M., Lee, Y., Young, N., **Udvardi, M.** 2015. Genome-wide Association of Drought-related and Biomass Traits with HapMap SNPs in *Medicago truncatula*. *Plant Cell and Environment*. 38, 1997–2011.
2. Zhang, J., Y. Lee, Torres-Jerez, I., Wang, M., Yin, Y., Chou, W., He, J., Shen, H., Srivastava, A.C., Pennacchio, C., Lindquist, E., Grimwood, J., Schmutz, J., Xu, Y., Sharma, M., Sharma, R., Bartley, L.E., Ronald, P.C., Saha, M.C., Dixon, R.A., Tang, Y., **Udvardi, M.K.** 2013. Development of an Integrated Transcript Sequence Database and a Gene Expression Atlas for Gene Discovery and Analysis in Switchgrass (*Panicum virgatum* L.). *Plant J.* 74:160-173.
3. Bahulikar, R. A., Torres-Jerez, I., Worley, E., Craven, K., **Udvardi, M. K.** 2014. Diversity of Nitrogen-Fixing Bacteria Associated with Switchgrass in the Native Tall-Grass Prairie of Northern Oklahoma. *Appl. Environ. Microbiol.* 80:5636-5643.
4. Zhang, J. Y., Cruz, D. E. Carvalho M. H., Torres-Jerez, I., Kang, Y., Allen, S. N., Huhman, D. V., Tang, Y., Murray, J., Sumner, L. W., **Udvardi, M. K.** 2014. Global Reprogramming of Transcription and Metabolism in *Medicago truncatula* during Progressive Drought and after Rewatering. *Plant Cell Environ.* 37:2553-76.
5. Kang, Y., Han, Y., Torres-Jerez, I., Wang, M., Tang, Y., Monteros, M, **Udvardi, M.** 2011. System Responses to Long-term Drought and Re-watering of Two contrasting Alfalfa Varieties. *Plant Journal.* 68: 871-889.

#### (ii) Other Significant Products

1. **Udvardi, M. K.** and P. Poole. 2013. Transport and Metabolism in Legume Root Nodules. *Annual Review of Plant Biology.* 64:781-805.

2. Sanchez, D. H., Schwabe, F., Erban, A., **Udvardi, M. K.**, Kopka, J. 2012. Comparative Metabolomics of Drought Acclimation in Model and Forage Legumes. *Plant, Cell and Environment* 35:136-49.
3. Young ND1, Debelle F, Oldroyd GE, Geurts R, Cannon SB, **Udvardi MK**, Benedito VA, Mayer KF, Gouzy J, Schoof H, Van de Peer Y, Proost S, Cook DR, Meyers BC, Spannagl M, Cheung F, De Mita S, Krishnakumar V, Gundlach H, Zhou S, Mudge J, Bharti AK, Murray JD, Naoumkina MA, Rosen B, Silverstein KA, Tang H, Rombauts S, Zhao PX, Zhou P, Barbe V, Bardou P, Bechner M, Bellec A, Berger A, Bergès H, Bidwell S, Bisseling T, Choisine N, Couloux A, Denny R, Deshpande S, Dai X, Doyle JJ, Dudez AM, Farmer AD, Fouteau S, Franken C, Gibelin C, Gish J, Goldstein S, González AJ, Green PJ, Hallab A, Hartog M, Hua A, Humphray SJ, Jeong DH, Jing Y, Jöcker A, Kenton SM, Kim DJ, Klee K, Lai H, Lang C, Lin S, Macmil SL, Magdelenat G, Matthews L, McCarrison J, Monaghan EL, Mun JH, Najar FZ, Nicholson C, Noirot C, O'Bleness M, Paule CR, Poulain J, Prion F, Qin B, Qu C, Retzl EF, Riddle C, Sallet E, Samain S, Samson N, Sanders I, Saurat O, Scarpelli C, Schiex T, Segurens B, Severin AJ, Sherrier DJ, Shi R, Sims S, Singer SR, Sinharoy S, Sterck L, Viollet A, Wang BB, Wang K, Wang M, Wang X, Warfsmann J, Weissenbach J, White DD, White JD, Wiley GB, Wincker P, Xing Y, Yang L, Yao Z, Ying F, Zhai J, Zhou L, Zuber A, Dénarié J, Dixon RA, May GD, Schwartz DC, Rogers J, Quétier F, Town CD, Roe BA. 2011. The *Medicago* Genome Provides Insight into the Evolution of Rhizobial symbioses. *Nature*. 480(7378):520-4.
4. Young, N.D. and **Udvardi, M.K.** 2009. Translating *Medicago truncatula* Genomics to Crop Legumes. *Curr. Opin. Plant Biol.* 12:193-201.
5. Benedito, V. A., Torres-Jerez, I., Murray, J. D., Andriankaja, A., Allen, S., Kakar, K., Wandrey, M., Verdier, J., Zuber, H., Ott, T., Moreau, S., Niebel, A., Frickey, T., Weiller, G., He, J., Dai, X., Zhao, P. X., Tang, Y., **Udvardi, M. K.** 2008. A Gene Expression Atlas of the Model Legume *Medicago truncatula*. *Plant J.* 55:504-13.

#### D. SYNERGISTIC ACTIVITIES

- Editor of The Plant Cell (2015-present), Functional Plant Biology (2008-2014) and of Molecular Plant-Microbe Interactions (2001-2006).
- Peer reviewer for the journals Science, PNAS, Plant Cell, Plant Journal, Plant Physiology, New Phytologist, Plant Cell and Environment, Plant Molecular Biology, Molecular Plant Microbe Interactions, FEBS Letters, Journal of Biological Chemistry, BMC Genomics, BMC Plant Biology, Physiologia Plantarum, Phytochemistry, Symbiosis, Australian Journal of Plant Physiology, Functional Plant Biology, Molecular and Cellular Proteomics, Plant Cell Reports, and Biotechnology.
- Ad-hoc reviewer for the granting agencies: NSF and USDA (USA); ARC (Australia); NOW (The Netherlands); DFG (Germany); ANR (France); and ERA-NET Plant Genomics and EU Framework VII (Europe).
- Conference organizer: 2nd European Conference on the Molecular Genetics of Model Legumes, Golm, Germany, 2001; and the 5th International Conference on Legume Genetics and Genomics, Asilomar, USA (2010).
- Member, Executive Committee of the Oklahoma Bio-energy Centre, 2007-2011.