



ZNANSTVENI CENTAR IZVRSNOSTI
ZA BIORAZNOLIKOST
I MOLEKULARNO OPLEMENJIVANJE BILJA



CENTRE OF EXCELLENCE
FOR BIODIVERSITY
AND MOLECULAR PLANT BREEDING
Crop-BioDiv

Genomska selekcija ratarskih kultura radionica

Poljoprivredni fakultet Sveučilišta J.J. Strossmayera u Osijeku,
Vladimira Preloga 1, Aula magna, Osijek

25. 5. 2018. (petak) u 11.00 sati

Predavač: Dr. Aaron Lorenz, University of Minnesota, SAD

PROGRAM

1. Genomska selekcija – uvod, koncept, teorija
2. Genomska selekcija – alokacija resursa

3. Moje iskustvo – Oplemenjivanje bilja/ Genomska selekcija
Kukuruz
Strne žitarice (pšenica, ječam)
Soja
4. Genomska selekcija – praktični dio: setovi podataka, skriptovi, upute

Prijevod na hrvatski nije osiguran

Dr. AARON J. LORENZ

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University of Minnesota
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Education

PhD, University of Wisconsin, 2008, Plant Breeding and Plant Genetics
M.S., Iowa State University, 2005, Plant Breeding
B.S., University of Minnesota, 2002, Science in Agriculture-Plant Science Employment

Employment

Assistant Professor (75/25 Research/Teaching), University of Minnesota, Department of Agronomy and Plant Genetics, April 2015 – Present.
Assistant Professor (80/20 Research/Teaching), University of Nebraska, Department of Agronomy and Horticulture, July 2010 – March 2015.
Postdoctoral Research Associate, USDA-ARS/Cornell University, Jan 2009 – June 2010.
Graduate Research Assistant, Maize silage breeding program, University of Wisconsin, Aug 2005 – Dec 2008.
Graduate Research Assistant, Maize breeding and genetics, Iowa State University, May 2003 – Aug 2005.

The 5 most cited papers

1. Jannink, J. L., Lorenz, A. J., & Iwata, H. (2010). Genomic selection in plant breeding: from theory to practice. *Briefings in functional genomics*, 9(2), 166-177.
2. Heffner, E. L., Lorenz, A. J., Jannink, J. L., & Sorrells, M. E. (2010). Plant breeding with genomic selection: gain per unit time and cost. *Crop science*, 50(5), 1681-1690.
3. Lorenz, A. J., Chao, S., Asoro, F. G., Heffner, E. L., Hayashi, T., Iwata, H., ... & Jannink, J. L. (2011). Genomic selection in plant breeding: knowledge and prospects. In *Advances in agronomy*(Vol. 110, pp. 77-123). Academic Press.
4. Yu, L. X., Lorenz, A., Rutkoski, J., Singh, R. P., Bhavani, S., Huerta-Espino, J., & Sorrells, M. E. (2011). Association mapping and gene–gene interaction for stem rust resistance in CIMMYT spring wheat germplasm. *Theoretical and applied genetics*, 123(8), 1257-1268.
5. Lorenz, A. J., Hamblin, M. T., & Jannink, J. L. (2010). Performance of single nucleotide polymorphisms versus haplotypes for genome-wide association analysis in barley. *PLoS One*, 5(11), e14079.

The workshop is organized as part of the HRZZ project "Genetics and physiology of multiple-stress tolerance in maize"