

Curriculum Vitae

Torres-Rodriguez Jorge Vladimir
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University of Nebraska-Lincoln, Lincoln, NE, USA

Skills

- Teamwork
- Data analysis and management
- Image analysis
- R language (advanced)
- Bash command line (intermediate)
- Spanish Language
- Transcriptomic analysis
- Maize crosses
- Molecular marker application
- Real time-PCR analysis
- Writing and summarizing results for publications and reports
- English language (advanced)

Academic History

Postdoctoral Scholar, University of Nebraska-Lincoln, Lincoln, NE, USA
| October 2021 - present

- Finding associations between gene expression and phenotypes in maize (TWAS)
- Prediction of agronomic traits in maize using Random Forest and gene expression data from different environments.
- SNPs calling from ~800 maize RNA-Seq libraries using GATK.

PhD in Plant Biotechnology , Langebio-Centro de Investigación y Estudios Avanzados (CINVESTAV), Irapuato, Mexico | March 2017 - August 2021

- To elucidate the effect of nitrogen deficiency on the molecular phosphorus starvation response in maize using transcriptional, ionic and phenotypic data.
- Manual phenotyping in fields and greenhouses.
- Identification of parental regions within crosses using SNPs.

- Maize crosses.

**MSc in Plant Biotechnology, Langebio-CINVESTAV | September 2014 -
February 2017**

- Marked assisted selection of lines with parviglumis introgression.
- Data analysis using linear mixed models to filter out environmental effects.
- Greenhouse and laboratory plant sampling (root and aerial parts).

**BSc in Agroindustrial Engineering, Universidad Autónoma Chapingo,
Texcoco, México | August 2009 - June 2013**

- Training related to agricultural and industrial management of several crops.

Oral Talks

1. “A small subset of genes can predict flowering time with high accuracy in maize”
MLCAS2022. October 10th -11th

Publications

1. Sun, G., Wase, N., Shu, S., Jenkins, J., Zhou, B., **Torres-Rodríguez, J. V.**, ... & Schnable, J. C. (2022). Genome of *Paspalum vaginatum* and the role of trehalose mediated autophagy in increasing maize biomass. *Nature Communications*, 13(1), 1-20.
2. Alonso-Nieves, A. L., Salazar-Vidal, M. N., **Torres-Rodríguez, J. V.**, Pérez-Vázquez, L. M., Massange-Sánchez, J. A., Gillmor, C. S., & Sawers, R. J. (2022). The *pho1; 2a0-m1.1* allele of *Phosphate1* conditions misregulation of the phosphorus starvation response in maize. *Plant Direct*, 6(7)
3. **Torres-Rodríguez, J. V.**, Salazar-Vidal, M. N., Chávez Montes, R. A., Massange-Sánchez, J. A., Gillmor, C. S., & Sawers, R. J. (2021). Low nitrogen availability inhibits the phosphorus starvation response in maize (*Zea mays* ssp. *mays* L.). *BMC plant biology*, 21(1), 1-18.
4. Crow, T., Ta, J., Nojoomi, S., Aguilar-Rangel, M. R., **Torres Rodríguez, J. V.**, Gates, D., ... & Runcie, D. (2020). Gene regulatory effects of a large chromosomal inversion in highland maize. *PLoS genetics*, 16(12), e1009213.

References

1. James C. Schnable (Postdoctoral Advisor) University of Nebraska-Lincoln, USA.
schnable@unl.edu
2. Ruairidh Sawers (PhD and Msc Advisor) Penn State University, USA. rjs6686@psu.edu
3. Rubén Rellán-Álvarez (Msc Co-Advisor) North Carolina State University, USA.
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