Curriculum Vitae

Personal information

First name(s) / Surname(s)	**Octavio Rubén Salazar Moya**
Address	Tercera Privada de Diana #25 62330 Cuernavaca, Morelos (Mexico)
Mobile	+52 1 7772352156
E-mail(s)	octavio.rsm@gmail.com
Nationality	Mexican
Date of birth	18 November 1985
Gender	Male

Work/Laboratory experience

Dates	01 April 2011 → 31 July 2011
Occupation or position held	MSc. Internship
Main activities and responsibilities	In the laboratory of Dr. Jane Langdale (Head of the Department) as part of the C_4 Rice project, the expression of several genes was analyzed in order to identify possible regulators of the Kranz anatomy in Maize. The expression of gene candidates was analyzed across 16 different tissues from samples forming and not forming the Kranz anatomy. Genes were sorted according to their expression profile identifying the most likely candidates for further characterization.
Name and address of employer	Department of Plant Sciences, University of Oxford South Parks Road Oxford, OX1 3RB, UK
Type of business or sector	University´s Research Department

Dates	02 August 2010 → 31 March 2011
Occupation or position held	MSc. Thesis
Main activities and responsibilities	Under the supervision of Dr. Gerard van der Linden (Head researcher) the activities of different sugar partitioning enzymes were analyzed in different potato genotypes under different levels of drought stress. Vacuolar, cell wall, and cytosolic invertase activities were measured and correlated with the different drought treatments and with sink and source tissues. The analysis revealed different patterns of activities between tissues and treatments.
Name and address of employer	Plant Research International 1, Droevendaalsesteeg, 6708PB Wageningen (The Netherlands)
Type of business or sector	Research services in agriculture, horticulture, and rural and environmental development

Dates	16 January 2008 → 16 May 2009
Occupation or position held	BSc. Thesis
Main activities and responsibilities	Under the supervision of Dr. Stefan de Folter (Head researcher) 5 MADS-box type I genes were characterized. GUS, GUS-GFP, and RNAi constructs were made for each gene and transformed into *Arabidopsis thaliana*. Mutants and t-DNA insertion lines were analyzed looking for expression localization and for possible phenotypic differences.
Name and address of employer	CINVESTAV-LANGEBIO (Research Center and Advanced Studies – National Laboratory of Genomics for Biodiversity). Km 9.6, Libramiento Norte Carretera León, 36821 Irapuato (Mexico)
Type of business or sector	Research Center

Dates	26 August 2007 → 09 December 2007
Occupation or position held	Student/Researcher
Main activities and responsibilities	Under the supervision of Dr. David Romero Camarena, Head of the program on Genome Engineering, Plasmid C of *Rhizobium etli* was analyzed and searched for conserved regions and/or operons looking for metabolic pathways. A conserved region was identified possibly involved in the catabolism of the L-amino acids valine, leucine, and isoleucine.
Name and address of employer	CCG (Center of Genomic Sciences) s/n, Av. Universidad Col. Chamilpa, 62210 Cuernavaca (Mexico)
Type of business or sector	Research Center

Dates	09 September 2006 → 03 July 2007
Occupation or position held	Student/Researcher
Main activities and responsibilities	Under the supervision of Dr. Maria Alejandra Bravo de la Parra (Head researcher), the promoter regions of the cry toxin gene family from *Bacillus thuringiensis* were analyzed. Conserved blocks were identified in the upstream regions of several cry genes. Some transcriptional fusions were created that were used in the analysis of such genes.
Name and address of employer	IBT (Institute of Biotechnology) 2001, Av. Universidad, 62210 Cuernavaca (Mexico)
Type of business or sector	Research Institute

Education and training

Dates	01 September 2009 → 31 August 2011
Title of qualification awarded	MSc. in Plant Biotechnology specialization Molecular Plant Breeding
Principal subjects / occupational skills covered	Plant Breeding, genomics, plant biotechnology, molecular aspects of biointeractions, academic consultancy training (Fraunhofer IME, Germany), advanced programming, and statistics.
Name and type of organisation providing education and training	Wageningen University (University) 2, Droevendaalsesteeg, 6708 PB Wageningen (The Netherlands)

Dates	16 August 2004 → 12 May 2009
Title of qualification awarded	BSc in Genomic Sciences
Principal subjects / occupational skills covered	Knowledge on cellular processes, mathematical models, basic programming, gene regulation, genome comparisons, and statistical tests.
Name and type of organisation providing education and training	National Autonomous University of Mexico (UNAM) (University) s/n, Av. Universidad Col. Chamilpa, 62210 Cuernavaca (Mexico)

Personal skills and competences

Mother tongue(s)	Spanish
Other language(s)	English (proficient user), French (intermediate user)
Technical skills and competences	Course on Project Planning and Organising. Knowledge of several laboratory techniques involved in genetics. Transformation, PCRs, RT-PCRs, DNA/RNA extraction, constructs, enzymatic assays. One week intensive course in Plant biotechnology and Transgenic plants given by Maarten Chrispels from UCSD (University of California San Diego) at IBT UNAM. One week intensive course in Analysis of Sequences Produced by New Generation Technologies (Bioconductor, R)
Computer skills and competences	Intermediate programming in Perl, basic C. Knowledge on several genomic databases. Intermediate knowledge of Linux and Unix. Diploma in “Information Systems Analyst”. Learnt about Flash, Visual basic, Visual Fox-pro, Java, Maintenance, among others.

Additional information

Awarded with HSP Huygens Scholarship Programme, September 2009 → September 2011 (Scholarship of Excellence awarded by the Dutch government to international students to follow a master's degree in the Netherlands).

Awarded with Concyteg's scholarship for Bachelor's thesis, September 2008 → January 2009.

Highest mathematical score at High school (ITESM Campus Cuernavaca) in Ceneval test (a national applied test in order to measure one's level in order to enter a high level education), March 2004.

Completed the fifth semester of High School in Winnipeg Canada during an exchange from July → December 2003.

Humberto Lopez-Pineda award for first place in city's mathematics contest category Arithmetic and Algebra, May 2001.

Publication (Scientific divulgation)

Article:

Marsch, N., Zuñiga, V., Reyes, J., Salazar, O., de Folter, S. (2009) Genómica Funcional de Plantas: Estudio del Desarrollo de Flores y Frutos, *Acta Universitaria*, Vol. 19, Num. **1**:21-29.
Title translation: Plant Functional Genomics: Study of the Development of Fruits and Flowers

Abstract:

The last stages of floral development are ovule fertilization and fruit formation. Fruits are very important both biologically and economically. Notably, more than 80% of human food is obtained from flowers and fruits. Gathering basic knowledge about the molecular mechanisms of fruit development from model species is of great scientific interest, and is an essential step to facilitate research and, when feasible, applications in fruits consumed by humans. Especially in countries like Mexico, which has such a great diversity of fruits, this kind of research is both necessary and scientifically interesting, and has potentially important economic repercussions. The goal of the lab is to discover new genes that are involved in flower development, making use of the resources provided by model plants like *Arabidopsis thaliana*. A special focus is made on genes and processes that can affect cell and tissue identity, morphology, and that can cause parthenocarpy (fruits without seed). These genes and processes can then be studied in other species and their effects in those species assessed.