**Miguel Angel Pedroza Villarreal, PhD**

Birthdate and place : 11 June, 1983 ; Monterrey, Mexico.

Civil status : married

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Address : 19, rue Saint Michel C702. Lyon, France 69007

Telephone: +33 613935272

<http://miguelpedroza.weebly.com/>

**Current Position**

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| **Research Engineer**  June 2016-to date  **Postdoctoral Researcher**  Aug 2014-May2014 | **CNRS Institut de Science Cognitive Marc Jeannerod UMR 5229**  Neuroeconomics, Reward and Decision Making Laboratory,  Lyon, France  Research project: Influence of genetic traits and multisensory integration of wine flavor in the brain |

**Education**

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| **PhD in Enology** | **Universidad de Castilla-La Mancha**  Albacete, Spain. 2012 |

Thesis Title: Revalorization of waste grape skins from the juice industry as a new enological product

**Cum Laude Mention**

**International PhD Mention** (awarded after an international peer-review evaluation, research internship in foreign center, and dissertation written in English)

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| **MSc Agricultural Science and Engineering** | **Universidad de Castilla-La Mancha**  Albacete, Spain. 2010 |
| **Advanced Studies in Enology Diploma** | **Universidad de Castilla-La Mancha**  Albacete, Spain. 2009 |
| **BSc Food Industries Engineering** | **Instituto Tecnológico y de Estudios Superiores de Monterrey**  Monterrey**,** Mexico. 2006 |

**Academic Awards**

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| **National Researchers System Level I** | National Science and Technology Council of the Mexican Government (**CONACYT**)  2014-2017 |
| **International Post-Doctoral Fellowship**  **Fellowship No. 232086** | National Science and Technology Council of the Mexican Government (**CONACYT**)  2014-2015 |
| **International Doctoral Fellowship**  **Fellowship No. 207976** | National Science and Technology Council of the Mexican Government (**CONACYT**)  2007-2012 |

**Languages**

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| **Language** | **Speaking** | **Reading** | **Writing** |
| Spanish | Native language | | |
| English | Fluently | Fluently | Fluently |
| French | Advanced | Advanced | Intermediate |
| Italian | Beginner | Beginner | Beginner |

**Scientific Publications in Peer Review Journals**

**Pedroza, M.A.**, Maggi, L., Amendola, D., Zalacain,A., De Faveri, D.M., Spigno,G. (2015). Microwave assisted extraction of phenolic compounds from dried waste grape skins. ***International*** ***Journal of Food Engineering***. *11*(3), 359-370 DOI: [10.1515/ijfe-2015-0009](http://dx.doi.org/10.1515/ijfe-2015-0009),

**Pedroza, M. A.,** Carmona, M., Alonso, G. L., Salinas, M. R., & Zalacain, A. (2013). Prebottling use of dehydrated waste grape skins to improve color, phenolic, and aroma composition of red wines. ***Food Chemistry***, *136*(1)*,* 224-236. DOI: [10.1016/j.foodchem.2012.07.110](http://dx.doi.org/10.1016/j.foodchem.2012.07.110)

**Pedroza, M. A**., Carmona, M., Pardo, F., Salinas, M. R., & Zalacain, A. (2012). Waste grape skins thermal dehydration: potential release of colour, phenolic and aroma compounds into wine**. *CyTA - Journal of Food***, *10*(3), 225-234. DOI: [10.1080/19476337.2011.633243](http://dx.doi.org/10.1080/19476337.2011.633243)

**Pedroza, M. A**., Carmona, M., Salinas, M. R., & Zalacain, A. (2011). Use of dehydrated waste grape skins as a natural additive for producing rosé wines: study of extraction conditions and evolution. ***Journal of Agricultural and Food Chemistry***, *59*(20), 10976-10986. DOI: [10.1021/jf202626v](http://dx.doi.org/10.1021/jf202626v)

**Pedroza, M. A**., Zalacain, A., Lara, J. F., & Salinas, M. R. (2010). Global grape aroma potential and its individual analysis by SBSE-GC-MS. ***Food Research International***, *43*(4), 1003-1008. DOI: [10.1016/j.foodres.2010.01.008](http://dx.doi.org/10.1016/j.foodres.2010.01.008)

Lorenzo, C., Garde-Cerdán, T., **Pedroza, M. A**., Alonso, G. L., & Salinas, M. R. (2009). Determination of fermentative volatile compounds in aged red wines by near infrared spectroscopy. ***Food Research International***, *42*(9), 1281-1286. DOI: [10.1016/j.foodres.2009.03.021](http://dx.doi.org/10.1016/j.foodres.2009.03.021)

Marín, J., Ocete, R., **Pedroza, M.**, Zalacain, A., de Miguel, C., López, M. A., & Salinas, M. R. (2009). Influence of the mite Carpoglyphus lactis (L) on the aroma of pale and dry wines aged under flor yeasts. ***Journal of Food Composition and Analysis***, 22(7-8), 745-750. DOI: [10.1016/j.jfca.2009.01.017](http://dx.doi.org/10.1016/j.jfca.2009.01.017)

**Book Chapters**

**Pedroza, M. A.**, Salinas, M. R., Alonso, G. L., & Zalacain, A. (2017). Chapter 10. Oenological applications of wine-making by-products. In C. M. Glanakis (Ed.), Handbook of Grape Processing By-products: Sustainable Solutions: Elsevier.

**Research Internships**

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| **Research Internship**  Microwave assisted extraction of grape marc | Universitá Cattolica del Sacro Cuore  Istituto di Enologia e Ingegnieria Agroalimentare,  Piacenza, Italy  November 2011-January 2012 |
| **Research Internship**  Waste grape skins preliminary evaluation | Bodegas San Isidro  Jumilla, Spain  March-April, 2010 |

**Grantsmanship**

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| **CONACYT International Postdoctoral Grant** | Centre de Neurosciences Cognitives  Centre National de la Recherche Scientifique UMR 5229  Université Claude-Bernard Lyon 1, France |

**Proposal Title:** Effect of wine labels on reward-related brain activity

**Financing Organization:** National Science and Technology Council of Mexico, CONACYT

**Scientific Advisor:** Jean-Claude Dreher, PhD

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| **Marie Curie Intra-European Fellowship Candidate**  Evaluation : Proposal of *Good Quality*  Proposal Number 626313 | Centre de Neurosciences Cognitives  Centre National de la Recherche Scientifique  Université Claude-Bernard Lyon 1, France |

**Proposal Title:** Effect of wine labels on reward-related brain activity

**Financing Organization:** European Council under the 7th Framework Program

**Scientist in Charge:** Jean-Claude Dreher, PhD

**Viticulture & Enology Professional and academic experience**

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| **Viticulture and Enology Internship**  Region : Côtes de Jura  Harvest, winemaking of red, white and sweet, wine, assamblages, and sales work | **Domaine Xavier Reverchon**  **Poligny France**  August 2013-March 2014 |
| **Semester Abroad Program**  Courses: wine production and analysis, fruit and vegetable processing | **Oregon State University**.  Corvallis, OR, **U.S.A.**  Sep-Dec 2005 |
| **Viticulture and Enology Internship**  Region Premières Côtes de Bordeaux  Vineyard maintenance winery and sales work | [**Château Peneau**](http://chateaupeneau.free.fr/)  Bordeaux, **France**  July 2005 |
| **Summer Abroad Program**  Viticulture and Enology | **École Supérieure d’Agriculture PURPAN**  Toulouse, **France**  June 2005 |

**Professional tasting and sensory evaluation**

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| **Expert jury : *Chardonnay du Monde 2016 International wine contest***  Burgundy, Spain and Morocco wines | Château des Ravatys,  10,11 March. |
| **Expert jury training for *Chardonnay du Monde International wine contest*.** | Institut Paul Bocuse,  February 3, Ecully, France |
| **Judge Concours Général Agricole, Paris 2016**  Cotes de Brouilly, Alsace | Ministère de l´Agriculture et l´Alimentation  February 21-23. Paris, France |
| **Jury *Concours Général Agricole Paris 2015***  Champagne, South-west wines, Beer | Ministère de l´Agriculture et l´Alimentation  February 21-23. Paris, France |
| **Jury *Concours Général Agricole Paris 2014***  Saint Emilion Grand Cru | Ministère de l´Agriculture et l´Alimentation  February 23- 24. Paris, France |

**Research Projects**

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| **Universidad de Castilla-La Mancha**  **Project Researcher** | Agricultural Chemistry Laboratory  Albacete, Spain |

**Project Title**: Evaluation of a methodology for determining grape and wine aroma precursors at wineries

Financing Organization: Bodega Martín Códax (DO Rías Baixas, Galicia, Spain), Bodegas y Viñedos Pittacum (DO Bierzo, Castila León, Spain), Bodega Heredad Ugarte (DOC Rioja Alavesa, Spain)

**Project Leader:** Prof. Ma. Rosario Salinas, PhD

**Duration:** October-December, 2012

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| **Universidad de Castilla-La Mancha**  **Project Researcher** | Agricultural Chemistry Laboratory  Albacete, Spain |

**Project Title**: Optimization of phenolic and aroma extracts from grape processing by-products. Project Reference: 0114101087

**Financing Organization:** Junta de Comunidades de Castilla-La Mancha (Regional Government of Castilla-La Mancha, Spain)- Julian Soler S.A. Grape Juice Concentrate Factory

**Project Leader:** Amaya Zalacain Aramburu, PhD

**Dates:** 01/10/2010 to 31/12/2011

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| **Universidad de Castilla-La Mancha**  **Project Researcher** | Agricultural Chemistry Laboratory  Albacete, Spain |

**Project Title**: Testing of BIOLAN biosensors to determine wine and grape aroma potential

**Financing Organization:** BIOLAN S. L.

**Participant wineries and laboratories:** Bodegas y Viñedos Labastida Solagüen, La Rioja, Spain; Bodega Contador, San Vicente de la Sonsierra, La Rioja, Spain; Estación Enológica de Haro, La Rioja, Spain.

**Project Leader:** Manuel Carmona, PhD

**Dates:** 10-20 October, 2011

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| **Universidad de Castilla-La Mancha**  **Project Researcher** | Agricultural Chemistry Laboratory  Albacete, Spain |

**Project Title**: Evaluation of dehydrated waste grape skins as new enological product for enhancing wine color and aroma

**Financing Organization**: Junta de Comunidades de Castilla-La Mancha (Regional Government of Castilla-La Mancha, Spain)

**Project Leader:** Amaya Zalacain Aramburu, PhD

**Project ID:** PAI08-0148-9842

**Dates:** 2008-2010

**Teaching Experience**

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| **Internship Advisor Naomi Garaux**  Undergraduate student of Biology  Topic: *fMRI data analysis and wine stimuli* | Ecole Normal Superior de Lyon  CNRS Institut de Science Cognitive Marc Jeannerod UMR 5229  Neuroeconomics, Reward and Decision Making Laboratory,  Lyon, France. 2016 |
| **Internship Advisor Marylou Mantel**  Master 1 student  Topic: *fMRI data analysis and wine stimuli* | Ecole Normal Superior de Lyon  CNRS Institut de Science Cognitive Marc Jeannerod UMR 5229  Neuroeconomics, Reward and Decision Making Laboratory,  Lyon, France. 2016 |
| **Internship Advisor Carine de Sousa**  Master 1 Student  Biologie Intégrative Physiologie et Neurosciences  Topic: *multisensory integration and brain activity* | Université Claude Bernard Lyon 1  CNRS Institut de Science Cognitive Marc Jeannerod UMR 5229  Neuroeconomics, Reward and Decision Making Laboratory,  Lyon, France 2016 |
| **Internship Advisor Estelle Raffin**  Master 1 Student  Biologie Intégrative Physiologie et Neurosciences  Topic: *Perceptual collective decisions of wine* | Université Claude Bernard Lyon 1  CNRS Institut de Science Cognitive Marc Jeannerod UMR 5229  Neuroeconomics, Reward and Decision Making Laboratory,  Lyon, France. 2015 |
| **Internship Advisor Cynthia Caetano**  Master 1 student  Biologie Intégrative Physiologie et Neurosciences  Topic: *Intégration Multimodal, Rôle de la vision dans le saveur du vin* | Université Claude Bernard Lyon 1  CNRS Institut de Science Cognitive Marc Jeannerod UMR 5229  Neuroeconomics, Reward and Decision Making Laboratory,  Lyon, France 2015 |
| **Internship Advisor Elena Calero**  Undergraduate student  Topic: new product development using grape marc | Universidad de Castilla-La Mancha  Agricultural Chemistry Laboratory, Albacete, Spain  Academic Year 2011-2012 |
| **Teacher Assistant**  Experimental Enological Chemistry Laboratory | Universidad de Castilla-La Mancha  Agricultural Chemistry Laboratory, Albacete, Spain  Academic Year 2008-2010 |
| **Invited Lecturer**  Advances in Enological Chemistry (MSc course) | Universidad de Castilla-La Mancha  Agricultural Chemistry Laboratory, Albacete, Spain. 2009-2011 |
| **Summer Course: Introduction to Enology**  (5 hours) | Instituto Tecnológico y de Estudios Superiores de Monterrey,  Monterrey, Mexico. 9-11 June 2007 |

**Participation in Scientific Congresses**

**Pedroza, M. A.**, Park, S. A., DeSousa, C., Gerardin, A., & Dreher, J. C. (2016). Influences of genetic polymorphism in olfactory sensitivity on wine multisensory integration decisions. Paper presented at the Human Decision Neuroscience Workshop, Delmenhorst, Germany.

Serrano de la Hoz, K., **Pedroza, M.A.**, Bonilla, I., Carmona, M., Salinas, M.R. (2013). Diferentes prácticas agronómicas en el potencial aromático glicosídico de uvas de la variedad Tempranillo. In: ***Congreso Nacional de Investigación Enológica GIENOL.*** Madrid, Spain.

Spigno, G., **Pedroza, M. A.**, Amendola, D., Maggi, L., Zalacain, A., DeFaveri, D.M. (2012) Polyphenols microwave assisted extraction from waste grape skins. **Proceedings of the International Conference Bio & Food Electrotechnologies. ISBN:** 978-88-903261-8-9. Salerno, Italy

**Pedroza, M. A.**, Carmona, M., Alonso, G. L., Salinas, M. R., & Zalacain, A. (2012). Polyphenol and color release from dehydrated waste grape skins into stored red wines. In: ***26th International Conference on Polyphenols****.* Florence, Italy.

**Pedroza, M. A.**, Amendola, D., Maggi, L., Zalacain, A., & Spigno, G. (2012). Microwave assisted extraction and antioxidant power of dried waste grape skins polyphenols. In: ***26th International Conference on Polyphenols****.* Florence, Italy.

Alonso, G. L., Carmona, M., Serrano-Díaz, J., Martínez-Gil, A.M. Serrano-de-La-Hoz, K., Maggi, L., **Pedroza, M. A.**, Zalacain, A. & Salinas, M. R. (2012). lnfluencia de los carotenoides en Ia calidad del azafrán y de las uvas de vinificación. In: ***lnternational Workshop Carotenoides como ingredientes de alimentos funcionales.*** Universidad de Sevilla, Seville, Spain.

**Pedroza, M. A.**, Carmona, M., Pardo, F., Alonso, G. L., Salinas, M. R., & Zalacain, A. (2011). Building Rosé Wines from Dehydrated Waste Grape Skins (Poster 141). In: ***XXXIV OIV World Congress of Vine and Wine****.* Porto, Portugal.

**Pedroza, M. A.** (2011). Recent advances in industrial reprocessing of waste grape skins. In: ***XXXIV OIV World Congress of Vine and Wine.*** Porto, Portugal. (**Oral communication**)

**Pedroza, M. A.**, Alonso, G. L., Carmona, M., Salinas, M. R., & Zalacain, A. (2010). Estudio de la dosificación, tiempo de maceración y granulometría de hollejos deshidratados sobre el color y la composción fenólica en vino sintético. In: ***VII Foro Mundial del Vino****.* Logroño, Spain.

**Pedroza, M. A.**, Alonso, G. L., Carmona, M., Salinas, M. R., & Zalacain, A. (2010). Evaluation of dehydrated white grape skins as copigment in red wine model solutions. In: ***VI International Congress on pigments in food: chemical, biological and technological aspects*** (pp. 113-116) **ISBN** 978-963-9970-04-5. Budapest, Hungary.

**Pedroza, M. A.**, Carmona, M., Alonso, G. L., Salinas, M. R., & Zalacain, A. (2010). Use of red grape skins to enhance the phenolic composition of wines. In: \****VI International Congress on pigments in food: chemical, biological and technological aspects*** (pp. 345-347) **ISBN** 978-963-9970-04-5. Budapest, Hungary.

**Pedroza, M. A.**, Alonso, G. L., Carmona, M., Salinas, M. R., & Zalacain, A. (2009). Efecto de la deshidratación en la composición fenólica de hollejos de distintas viníferas. In: ***X Congreso Nacional de Investigación Enológica GIENOL.*****ISBN**978-84-8158-438-7. Ourense, Spain.

**Pedroza, M. A.**, Lara, J. F., Zalacain, A., & Salinas, M. R. (2008). Resultados Preliminares sobre la determinación del potencial aromático de uvas tintas mediante SBSE-TD-GC-MS. In: ***XIV Congreso Nacional de Enólogos****.* San Lorenzo del Escorial, Madrid, Spain. (**Invited Speaker**).

**Scientific Divulgation**

**Pedroza, M.A.** (2016). NeuroEnologia. Seminarios sobre neurociencia aplicada a los alimentos. Universidad de Castilla-La Mancha, Albacete, April 7. Spain. (Invited speaker)

**Pedroza, M.A.** (2016). La perception du vin : un experience multi-sensorielle. Round table in : *La Semaine du cerveau*, Musee Claude Bernard, Saint-Julien-sous-Montmelas, March 18th, France. (Invited speaker)

**Pedroza, M.A.** (2015).Neuroscience perspective of wine flavor. Foreign Researchers Welcome Event Organized by Espace Ulys-Euraxess. Universite de Lyon. Lyon, France. February 5. (Invited Talk)

**Pedroza, M.A.**, Dreher, J.C. (2014). Modulation de la perception de l'arôme du vin par sa robe: une étude d’imagerie cérébrale originale. Dossier Spécial Neurosciences et vin. ***Revue des Oenologues***. 153s (Written Article)

**Pedroza, M.A.**, Carmona, M., Alonso, G.L., Salinas, M.R., Zalacain, A. (2011). Innovación en el uso de subproductos vitivinícolas: Hollejos de uva deshidratados. Revista Winetech.2, 22-24 (Written article)

**Pedroza, M.A.** (2009). Evaluación del uso de hollejos agotados de uva para mejorar las características aromáticas y cromáticas de los vinos. Seminar La ciencia In Vivo. Universidad de Castilla-La Mancha. Albacete, Spain. (Invited speaker)

**Relevant Undergraduate Experience**

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| **Coordinator of the Food Industries Engineering Student Society** | Instituto Tecnológico y de Estudios Superiores de Monterrey  2004-2005,**Mexico** |
| **General Coordinator of the XIV International Symposium of Food Industries Engineering**  “Alimenta tu Ingenio 2” | Instituto Tecnológico y de Estudios Superiores de Monterrey  March, 2005 **Mexico** |

**Analytical Apparatus, Data Analysis, and Computational Skills**

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| **Functional Magnetic Resonance Imaging**  Neurobehavioral Systems Presentation  Statistical Parametric Mapping (SPM)  Matlab |  |
| **Liquid and Gas Chromatography**  I have 5 years of experience operating and performing maintenance of both chromatographs. | Agilent GC-MSD 6890 and 7980  Agilent HPLC-DAD 1200  Agilent Chemstation Software for HPLC-DAD and GC-MS |
| **Stir Bar Sorptive Extraction**  I have used this technique for analyzing grapes, must, wine, and water. | Gerstel Twister Stir Bar Sorptive Extraction  Gesrstel Maestro Software |
| **Data Analysis-Statistical Software**  I have used both software for performing data analysis statistical tests of ANOVA, Factor Analysis, GLM, Discriminant Analysis, and PCA. | IBM-SPSS Statistics 19  Statgraphics XVI Centurion |

**Relevant Courses/Experience**

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| **Functional and anatomical Magnetic Resonance Imaging Workshop** | Institut National de la Santé et de la Recherche Médicale INSERM  Lyon, France February 2-6, 2015 |
| **Fundamentals of Neuroscience II**  Approved  https://verify.edx.org/cert/4bf869b883cb4182b20779e392774e06 | HarvardX  [http://www.mcb80x.org](http://www.mcb80x.org/)  January, 2015 |
| **Fundamentals of Neuroscience I**  Approved  https://verify.edx.org/cert/f060d5397e4d46d29cb480a9c150a423 | HarvardX  [http://www.mcb80x.org](http://www.mcb80x.org/)  February, 2014 |
| **Advanced Viticulture**  Online Course (120 hours) | InfoAgro Spain  [http://www.infoagro.com](http://www.infoagro.com/) |
| **Sustainable agriculture and use of pesticides**: Control and Risks (30 hours) | University of Murcia,  Águilas, Spain July, 2009 |

**Journal and Grant reviewer**

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| **Journal of the Science of Food and Agriculture** | Ed. Wiley |
| **PhD Grants Evaluator, CONACYT**  National call for outgoing international applications | National Science and Technology Council  May 2015, Mexico |
| **PhD Grants Evaluator, CONACYT**  National call for outgoing international applications | National Science and Technology Council  May 2014, Mexico |

**Other Professional Experience**

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| **GRUMA-Molinos Azteca S.A. de C.V.**  **Quality Assurance engineer** | Guadalupe, Nuevo León  September 2006 - January 2007,Mexico |