

## PERSONAL INFORMATION

### Ambrogina Albergamo

 Dept. of Biomedical, Dental, and of Morphological and Functional Images Sciences,  
University of Messina, c/o PanLab, Viale Annunziata 98168 Messina (ME) - Italy



Sex Female | Date of birth 21/01/1986 | Nationality Italian

## WORK EXPERIENCE

22/05/2016- Present

### Post Doc position

University of Messina, Department of Biomedical, Dental, and of Morphological and Functional Images Sciences

- Development and validation of new analytical methods (MDGC/MS and SFE-SFC/MS) for fast and reliable characterization of different food matrices
- Characterization of environmental and food matrices in terms of minerals and potential toxic elements by ICP-MS
- Profiling of bioactive compounds in food matrices by means of conventional HPLC/MS and <sup>1</sup>H-NMR techniques

01/10/2015- 01/04/2016

### Food QC analyst position

SCIENCE4LIFE Srl (Messina, Italy)

- Carrying out the daily/ routine and non-routine quality control activities to ensure the full implementation of the applied quality systems policies and procedures
- Carrying out and controlling products quality, processes and facilities to conform to quality standards and adopted accredited systems applied.

01/05/ 2015- 31/07/ 2015

### Stage Fellow position

ECOCONTROL SUD Srl (Priolo, Italy)

- Analysis of emerging organic contaminants in environmental solid matrices according to EPA 3580A, 3640A and 8270D

## EDUCATION AND TRAINING

01/01/2012- 01/01/2015

### PhD with Doctor Europaeus mention

Department of Biological and Environmental Sciences, University of Messina (Italy)

- Investigation of the complex biological mechanisms, at cellular and molecular level, of aquatic organisms living in anthropized environments and not in order to take part with not invasive methods in the determination and evaluation of eco-toxicologic damages.

01/02/2014- 01/01/2015

### PhD visiting student

Department of Pharmaceutical and Health Product Sciences, University of Messina (Italy)

- Development and validation of an approach based on nano-liquid chromatography coupled to electron-impact mass spectrometry (nanoLC/EI-MS) to characterize the free fatty acid profile of *Mytilus galloprovincialis* coming from an anthropogenically impacted-area. Such an approach demonstrated to be effective and sensitive for investigating the biological alterations induced by aquatic pollution and well suitable for biomonitoring programs.

01/05/2013- 31/07/2013

### PhD visiting student

CIMA- Centro de Investigação Marinha e Ambiental, Universidade do Algarve (Portugal)

- Investigation of the toxicity induced by nanomaterials in an aquatic bioindicator by proteomic techniques in order to clarify specific pathways of nanotoxicity, as well as develop and validate new biomarkers predictive of toxicity useful for the risk assessment procedure and monitoring programs.

01/01/2011- 31/12/2011

### Postgraduate trainee

Department of Neuroscience, Laboratory of Biochemistry and Molecular Biology, University Policlinic of Messina (Italy)

- Acquisition of methodologies and techniques involved in the development of genomics and proteomics of brain gliomas.

11/07/2011

### Senior Biologist Qualification

University of Messina (Italy)

01/10/2008- 31/12/2010

### Master's Degree in Cellular and Molecular Biology (110/100 cum laude)

University of Catania (Italy)

01/11/2009- 31/12/2010

### Master's Degree Trainee

Department of Molecular Biology, Computational Biology and Genetics, University Policlinic of Catania (Italy)

- Investigation of the biological role of a Micro-RNA involved in the glioblastoma multiforme pathogenesis, by exploiting the main techniques of molecular biology and bioinformatic.

01/09/2004-30/06/2008

### Bachelor's Degree in Biology (110/100 cum laude)

University of Messina (Italy)

Mother tongue(s)	Italian				
Other language(s)	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
Replace with language	C1	C1	C1	C1	C1
Cambridge ESOL: FCE (passed with merit)					
Levels: A1/2: Basic user - B1/2: Independent user - C1/2 Proficient user					
Common European Framework of Reference for Languages					

## PUBLICATIONS ON PEER-REVIEWED INTERNATIONAL JOURNALS

- Mottese, A. F., **Albergamo, A.**, Bartolomeo, G., Bua, G. D., Rando, R., De Pasquale, P., ... & Dugo, G. (2018). Evaluation of fatty acids and inorganic elements by multivariate statistics for the traceability of the Sicilian Capparid spinosa L. *Journal of Food Composition and Analysis*, 72, 66-74
- Cicero, N., **Albergamo, A.**, Salvo, A., Bua, G. D., Bartolomeo, G., Mangano, V., ... & Dugo, G. (2018). Chemical characterization of a variety of cold-pressed gourmet oils available on the Brazilian market. *Food Research International*, 109, 517-525.
- **Albergamo, A.**, Bua, G. D., Rotondo, A., Bartolomeo, G., Annuario, G., Costa, R., & Dugo, G. (2018). Transfer of major and trace elements along the "farm-to-fork" chain of different whole grain products. *Journal of Food Composition and Analysis*, 66, 212-220.
- Costa, R., **Albergamo, A.**, Bua, G. D., Saija, E., & Dugo, G. (2017). Determination of flavor constituents in particular types of flour and derived pasta by heart-cutting multidimensional gas chromatography coupled with mass spectrometry and multiple headspace solid-phase microextraction. *LWT-Food Science and Technology*, 86, 99-107.
- Certo G., Costa R., D'Angelo V., Russo M., **Albergamo A.**, Germanò MP. Anti-angiogenic activity and phytochemical screening of fractions from *Vitex agnus castus* fruits. *Natural Product Research* 31(24), 2850-2856.
- Lo Cascio, P., Calabrò, C., Bertuccio, C., Paterniti, I., Palombieri, D., Calò, M., **Albergamo A.** Salvo A., Gabriella Denaro, M. (2017). Effects of fasting and refeeding on the digestive tract of zebrafish (*Danio rerio*) fed with *Spirulina* (*Arthrospira platensis*), a high protein feed source. *Natural product research*, 31(13), 1478-1485.
- **Albergamo A.**, Rotondo A, Salvo A., Pellizzeri V., Bua G.D., Maggio A., Cicero N., Dugo G. Metabolite and mineral profiling of "Spinoso di Menfi" and "Violetto di Niscemi" globe artichokes by 1H-NMR and ICP-MS *Natural Product Research* 31(9), 990-999.
- Costa R., Bartolomeo G., Saija E., Rando R, **Albergamo A.**, Dugo G. Determination of alkyl esters content in young and aged Italian olive oils from different olive varieties and orchards provenance. *Journal of Food Quality* <https://doi.org/10.1155/2017/3078105>
- Cicero N., Naccari C., Cammilleri G., Giangrosso G., Cicero A., Gervasi T., Tropea A., **Albergamo A.**, Ferrantelli V. (2016) Monitoring of neonicotinoid pesticides in bee-keeping farm. *Natural Product Research* 31(11), 1258-1262.
- Costa R., **Albergamo A.**, Pellizzeri V., Dugo G. (2016) Phytochemical screening by LC-MS and LC-PDA of ethanolic extracts from the fruits of *Kigelia africana* (Lam.) Benth. Accepted on *Natural Product Research* 31(12), 1397-1402
- Gomes T., **Albergamo A.**, Costa R., Mondello L., Dugo G. (2016) Potential Use of Proteomics in Shellfish Aquaculture: from Assessment of Environmental Toxicity to Evaluation of Seafood Quality and Safety. *Current Organic Chemistry* 21(5), 402-425.
- Bua G.D., **Albergamo A.**, Annuario G., Zammuto V., Costa R., Dugo G. (2016) High-Throughput ICP-MS and Chemometrics for Exploring the Major and Trace Element Profile of the Mediterranean *Sepia* Ink. *Food Analytical Methods* 10(5), 1181-1190.
- Albergamo A.**, Rigano F., Purcaro, G., Mauceri, A., Fasulo, S., & Mondello, L. (2016). Free fatty acid profiling of marine sentinels by nanoLC-EI-MS for the assessment of environmental pollution effects. *Science of The Total Environment*. 571 (2016): 955-962.
- Costa R, **Albergamo A.**, Piparo M, Zaccone G, Capillo G, Manganaro A, Dugo P, Mondello L (2016). Multidimensional gas chromatographic techniques applied to the analysis of lipids from wild-caught and farmed marine species. *European Journal of Lipid Science and Technology*, DOI 10.1002/ejlt.201600043
- Bua G.D., Annuario G., **Albergamo A.**, Cicero N., Dugo G. (2016) Assessment of the heavy metal content in aromatic spices by inductively coupled plasma-mass spectrometry. *Food Additives and Contaminant* 9(3), 210-216.
- Rigano F., **Albergamo A.**, Sciarrone D., Beccaria M., Purcaro G., Mondello L. 2015. Nano Liquid Chromatography Directly

Coupled to Electron Ionization Mass Spectrometry for Free Fatty Acids Elucidation in Mussel. Analytical Chemistry. 88(7):4021-8

- Costa R., Beccaria M., Grasso E, **Albergamo A.**, Oteri M., Dugo P., Fasulo S., Mondello L. 2015. Sample Preparation techniques coupled to advanced chromatographic methods for marine organism investigation. Analytica Chimica Acta 875: 41-53.

## CONFERENCE PRESENTATIONS

-Costa, R., **Albergamo, A.**, Li Volsi, R., Bartolomeo, G., Bua, G.D, Ferracane, A., Gervasi, T., Capillo, G., Spanò, N., Dugo, G. An evaluation of the nutritional value of the jellyfish *Pelagia noctiluca*. XII Italian Food Chemistry Congress (CHIMALI), Camerino (IT) 24-27 September 2018. Poster communication.

-Cicero, N., Tardugno, R., **Albergamo, A.**, Salvo, A., Bartolomeo, G., Bua, G. D, Mangano, V., Rotondo, A., Di Stefano, V., Di Bella, G., Dugo, G. XII Italian Food Chemistry Congress (CHIMALI), Camerino (IT) 24-27 September 2018. Poster communication.

- **Albergamo, A.**, Mottese, A. F., Bartolomeo, G., Bua, G. D, Rando, R., De Pasquale, P., Saija, E., Donato, D., Dugo, G.. Evaluation of Fatty Acids and Inorganic Elements by Chemometrics for the Traceability of the Sicilian *Capparis spinosa* L. XII Italian Food Chemistry Congress (CHIMALI), Camerino (IT) 24-27 September 2018. Oral communication.

-Leonardi M.; Potorti A.; Rando R.; **Albergamo, A.**; Lo Turco, V.; Gervasi, T.; Bartolomeo, G.; Dugo G. Characterization of eight chicken meat preparations by sensory evaluation. XXVII Italo Latin-American Congress Of Ethnomedicine Society (SILAE), Milazzo (IT) 13-17 September 2018. Poster communication.

-Mottese, A. F., Vadalà, R., **Albergamo, A.**, Dugo, G.. Sustainable Management of Forests for Atmospheric CO<sub>2</sub> Depletion. XXVII Italo Latin-American Congress Of Ethnomedicine Society (SILAE), Milazzo (IT) 13-17 September 2018. Poster communication.

- **Albergamo, A.**, Mottese, A. F., Bua, G. D, Caridi F., Sabatino G., Barrega L., Costa, R., Dugo, G.. Discrimination of the Sicilian prickly pear (*Opuntia ficus-indica* L., cv. Muscaredda) according to the provenance by supervised and unsupervised chemometric methods. XXVII Italo Latin-American Congress Of Ethnomedicine Society (SILAE), Milazzo (IT) 13-17 September 2018. Poster communication.

-Mottese, A. F., **Albergamo, A.**, Bartolomeo, G., Bua, G. D, Rando, R., De Pasquale, P., Saija, E., Donato, D., Dugo, G.. Evaluation of Fatty Acids and Inorganic Elements by Chemometrics for the Traceability of the Sicilian *Capparis spinosa* L. XXVII Italo Latin-American Congress Of Ethnomedicine Society (SILAE), Milazzo (IT) 13-17 September 2018. Poster communication.

- **Albergamo, A.**, Bua, G. D, Rotondo, A., Bartolomeo, G., Ferrantelli, V., Colombo, A., Leonardi, M., Costa, R., Dugo, G. Transfer of major and trace elements along the “farm-to-fork” chain of different whole grain products. XXVII Italo Latin-American Congress Of Ethnomedicine Society (SILAE), Milazzo (IT) 13-17 September 2018. Poster communication.

- Cicero, N., **Albergamo, A.**, Tardugno, R., Bua, G.D, Di Bella, G., Dugo, G. Contenuto di selenio in oli raffinati estratti a freddo provenienti dallo stato di Minas Gerais ( Brasile): implicazioni per la sicurezza alimentare. 18° Congresso Nazionale della SITOX, 11 - 13 April 2018. Bologna (IT)

- Cicero, N., Tardugno R., **Albergamo, A.**, Bua, G.D., Di Stefano, V., Salvo A., Mangano V., Rotondo A., Di Bella, G., Dugo, G. Different Brazilian cold-pressed oils: Chemical composition and healthy properties. 255th American Chemical Society National Meeting, 18 – 22 March 2018. New Orleans (LA). Oral communication

-Li Volsi, R., Costa, R., **Albergamo, A.**, Bartolomeo, G., Bua, G. D, Ferracane, A., Gervasi, T., Capillo, G., Spanò, N., Dugo, G. An evaluation of the nutritional value of the jellyfish *Pelagia noctiluca*. 90° Convegno SIBS, 27-28 October 2017, Trapani (IT). Poster communication.

- **Albergamo, A.**, Costa, R., Rotondo, A., Mondello, L., Dugo, G. Fatty acid fingerprints of farmed and wild fish by GCxGC-MS combined with chemometrics for unmasking seafood mislabeling. 15<sup>th</sup> EUROFED Lipid congress, 27-30 August, Uppsala (SW). Oral communication.

- Salvo, A, **Albergamo, A.**, Rotondo, A., La Torre, L. G., Cicero, N., Donato, D., Bartolomeo, G., Mangano, V., Dugo, G. Study on the qualitative and quantitative composition of several sicilian evoos (harvesting year 2015). 15<sup>th</sup> EUROFED Lipid congress, 27-30 August, Uppsala (SW). Poster communication.

-Saija E., Bartolomeo G., **Albergamo A.**, Salvo A., Mangano V., Costa R., Dugo G. Development and validation of a SPE-based protocol for the GC-MS determination of FAMES and FAEEs in EVOO. 15<sup>th</sup> EUROFED Lipid congress, 27-30 August, Uppsala (SW). Poster communication.

-Gervasi,T.; Pellizzeri, V.; Vadalà,R.; De Pasquale, P.; Ferracane, A.; **Albergamo, A.**; Cicero, N.; Dugo,G. Pre/probiotic whey powder: a new functional and eco-friendly food product. XXVI Italo Latin-American Congress Of Ethnomedicine Society (SILAE) and IX Colombian Congress of Chromatography (COCOCRO), Bogotá DC (CO) 25-29 September 2017. Poster communication.

-Hriouch, F.; Ben Bakrim, W.; Aghraz, A.; Belakziz, M.; Larhsini, M.; Markouk, M.; Bekkouche, K.; Costa, R.; Pellizzeri, V.; Arrigo, S.; Cicero, N.; **Albergamo, A.**; Dugo, G. Chemical composition and antioxidant properties of infusions and essential oils of Moroccan Mentha species. XXVI Italo Latin-American Congress Of Ethnomedicine Society (SILAE) and IX Colombian Congress

of Chromatography (COCOCRO), Bogotá DC (CO) 25-29 September 2017. Poster communication.

-Costa R., **Albergamo A.**, Bua D.G., Dugo G. Determination of trace elements and flavor constituents in different types of flour and pasta samples by ICP-MS and HS-SPME-GC-MS. *Chimica Analitica* 2016, Taormina (IT) 18-21 September 2016. Poster communication.

-Bua G.D., Annuario G., **Albergamo A.**, Donato D., Zammuto V., Nicola C., Dugo G. Profiling of major and trace elements of the Mediterranean *sepia* ink by inductively coupled-mass spectrometry. XXV Italo-Latinamerican Congress of Ethnomedicine, SILAE, Modena (IT), 10-15 September 2016. Oral communication.

-Bua G.D., Annuario G., **Albergamo A.**, Cicero N., Dugo G. Assessment of the heavy metal content in aromatic spices by inductively coupled plasma-mass spectrometry. SILAE 2016, Modena (IT), 10-15 September 2016. Comunicazione poster.

-Rigano F., **Albergamo A.**, Sciarrone D., Beccaria M., Purcaro G., Mondello L. Characterization of free fatty acid profile in mussels by nanolc directly coupled to electron ionization mass spectrometry. 40<sup>th</sup> International Symposium on Capillary Chromatography and 13<sup>th</sup> GCxGC Symposium, Riva del Garda (IT), 29 May-3 June 2016. Poster communication.

-Donato P., Rigano F., **Albergamo A.**, Cacciola F., Beccaria M., Dugo P., Mondello L. Comprehensive lipid profiling in mussel samples by comprehensive liquid chromatography-tandem mass spectrometry. 40<sup>th</sup> International Symposium on Capillary Chromatography and 13<sup>th</sup> GCxGC Symposium, Riva del Garda (IT), 29 May-3 June 2016. Comunicazione poster.

-Certo G., D'Angelo V., Costa R., Russo M., **Albergamo A.**, Germano M.P. Proprietà antiangiogeniche e caratterizzazione fitochimica di frazioni estrattive ottenute dai frutti di *Vitex agnus-castus* (Verbenaceae). XXIV Congresso Nazionale di Fitoterapia, Arezzo (IT), 27-29 May 2016. Comunicazione poster.

-**Albergamo A.**, Rigano F., Sciarrone D., Purcaro G., Fasulo S., Mauceri A., Mondello L. Elucidating the free fatty acid profile of caged mussels, *Mytilus galloprovincialis*, for the assessment of environmental pollution. EEF 2015, Ecology at interface, Roma (IT), 21-25 September 2015. Oral Communication

-Rigano F., **Albergamo A.**, Beccaria M., Salivo S., Purcaro G., Tranchida P.Q., Mondello L. Elucidation of the free fatty acid profile in mussels *M. galloprovincialis* by a NanoLC-EI-MS system. Euro Fed Lipid Congress, Firenze (IT), 27-30 September 2015. Poster communication.

-**Albergamo A.**, Rigano F., Sciarrone D., Purcaro G., Fasulo S., Mauceri A., Mondello L. Elucidating the free fatty acid profile of caged mussels, *Mytilus galloprovincialis*, for the assessment of environmental pollution. EEF 2015, Ecology at interface, Roma (IT), 21-25 September 2015. Oral communication.

-Donato P., Rigano F., **Albergamo A.**, Cacciola F., Beccaria M., Dugo P., Mondello L. Comprehensive Liquid Chromatography-Tandem Mass Spectrometry for a Comprehensive Analysis of Lipids in Biological Systems. RDPA 2015, Recent Developments in Pharmaceutical Analysis, Perugia (IT). 28.6.-1.7.2015. Oral presentation

-Donato P., Rigano F., **Albergamo A.**, Cacciola F., Beccaria M., Dugo P., Mondello L. On-line LCxLC-MS/MS: a Powerful Unified Separation-Science Tool. 63rd ASMS Conference on Mass Spectrometry and Allied Topics. St. Louis, Missouri, USA, 31 May- 4 June 2015. Poster presentation

-Rigano F., **Albergamo A.**, Beccaria M., Salivo S., Sciarrone D., Purcaro G., Tranquida P.Q., Mondello L. Development of a NanoLC-EI-MS Method for the Characterization of the Free Fatty Acid Fraction in Mussels *Mytilus galloprovincialis*. 106th AOCS Annual Meeting. Orlando, Florida, USA, 3-6 May 2015. Poster presentation

-**Albergamo A.**, Gomes T., Fonseca T., Serrão Sousa V., Ribau Teixeira M., Mauceri A., Bebianno MJ. Investigation of protein expression signatures associated with long-term exposure to nanosized CuO and Cu<sup>2+</sup> ions in the clams *Ruditapes decussatus*. BIMAT 2014, 2nd Marine NanoEcosafety Workshop. Palermo (IT), 17-18 November 2014. Oral communication.

-Costa R., **Albergamo A.**, Oteri M., Piparo M., Purcaro G., Dugo P., Mondello L. Multidimensional Gas Chromatographic Techniques Applied to the Analysis of Lipids from Marine Species of the Mediterranean Sea. 106th AOCS Annual Meeting. Orlando, Florida, USA, 3-6 May 2015. Oral presentation

-**Albergamo A.**, Gomes T., Fonseca T., Serrão Sousa V., Ribau Teixeira M., Mauceri A., Bebianno MJ. Proteomic changes in the gill tissue of *Ruditapes decussatus* exposed to copper oxide nanoparticles. S.It.E 2014, XXIV Congresso della Società Italiana d'Ecologia. Ferrara (IT), 15-17 September 2014. Oral presentation

-Cacciola F., Donato P., Rigano F., **Albergamo A.**, Dugo P., Mondello L. Combining orthogonal multidimensional liquid chromatography approaches in food analysis. Comunicazione orale ISC 2014, 30th International Symposium on Chromatography, Salzburg (AU), 14-18 September 2014. Oral presentation

-Beccaria M., Costa R., Grasso E., **Albergamo A.**, Mondello L. Comparison of different extraction procedures for the GCXGC investigation of fats in fish and shellfish. ExTech 2014, 16th International Symposium on advances in extraction technologies,

Chania, Creta (GR), 25-28 May 2014. Poster presentation

Gomes T., **Albergamo A.**, Fonseca T., Sousa VS., Teixeira MR., Bebianno MJ. Impact of CuO NPs in the clam *Ruditapes decussatus* : proteomic response of water vs sediment. Comunicazione orale SETAC Europe-24th Annual Meeting, Basilea (CH), 11-15 May 2014. Oral presentation

## CONFERENCE AND WORKSHOP PARTECIPATIONS

-XII Italian Food Chemistry Congress CHIMALI 2018, 24-27 September, Camerino (IT)

-27<sup>th</sup> SILAE congress, 9-13 September, MIlazzo (IT).

-15<sup>th</sup> EUROFED Lipid congress, 27-30 August, Upssala (SW).

-XXV Italo-Latinamerican Congress of Ethnomedicine, SILAE. 10-15 September 2016, Modena (IT)

-EEF 2015- Ecology at Interface. 21-25 September 2016, Roma (IT)

-"L'ecologia oggi: responsabilità e Governance". XXIV Congresso della Società Italiana d'Ecologia (S.It.E) 15-17 September 2014. Ferrara (IT)

-"SETAC (Society of Environmental Toxicology and Chemistry) Europe 24th Annual Meeting" 11-15 May 2014. Basel, (SW)

-BIMAT 2014, 2nd Marine NanoEcosafety Workshop. Palermo (IT), 17-18 November 2014.

-74° Congresso dell'Unione Zoologica Italiana. 30 September-03 October 2013. Modena (IT)

-Primo 17- Pollutant Responses in Marine Organisms. 5-8 May 2013 Faro (PT).

## AWARDS AND PRIZES

-Post-doctoral Research fellow funded by Science4Life Srl "Caratterizzazione degli alimenti di origine animale e vegetale della dieta mediterranea, con particolare riferimento alla quantificazione di molecole di interesse biologico-nutrizionale."

-Fellowship funded by GICA for the participation of young researchers to the CHIMALI - XII Italian Food Chemistry Congress

- "SISSG Italian Young Researcher Grant" for the best abstract presented at the 15<sup>th</sup> EUROFED Lipid congress,

- Post-doctoral Research fellow funded by Science4Life Srl "Sviluppo di tecniche innovative per la caratterizzazione degli alimenti di origine animale e vegetale con particolare riferimento alla quantificazione di molecole di interesse biologico"

- Post-doctoral Research fellow funded by Science4Life Srl " Studio di frazioni lipidiche su matrici alimentari e della contaminazione degli alimenti mediante tecniche cromatografiche"

-"Roberto Marchetti Award" for the best oral communication at "EEF-Ecology at interface 2015"

- Stage Fellowship funded by "SOVVENZIONE GLOBALE PO F SE SICILIA 2007-2013"

- Visiting PhD – student Fellowship funded by " Erasmus Studio a.a. 2012-13"

- PhD fellowship funded by MIUR (Ministero dell'Istruzione, dell'Università e della Ricerca)

## PROJECT PARTNER

- "PRIN 2012: *Assessment of quality and safety of Mediterranean seafoods by "omics" sciences*" funded by Ministero Italiano dell'Università e della Ricerca Scientifica., nr. 2012TLC44W

- "PRIN 2010/2011: System Biology in the study of xenobiotic effects on marine organisms for evaluation of the environmental health status: Biotechnological applications for potential recovery strategies" funded by Ministero Italiano dell' Università e della Ricerca Scientifica. Prot. 2010ARLBT7\_001/008.

