

**Curriculum Vitae of Dr. Gennaro Roberto Abbamondi
(Last update June 2016)**

- Personal information:

Full name: Gennaro Roberto ABBAMONDI
Work address: SeaTech - Laboratoire MAPIEM - Université de Toulon
Bât. X, Avenue de l'Université - 83130 La Garde, France
Phone: +33(0)494142296
E-mail: abbamond@univ-tln.fr ; g.r.abbamondi@icb.cnr.it
Date of birth: May 17th 1985
Citizenship: Italian

- Current position:

- Post-doc researcher

Main activities: "Structural characterization of exopolysaccharides produced by marine biofilm-forming bacteria"

date: 18/06/2015; reference number: Contrat n° 2014/2015 - 188

Supervisor: Dr Annick Ortalo-Magné

Associate Professor SeaTech - Laboratoire MAPIEM - Université de Toulon

Phone: +33(0)494142827 fax: +33(0)494142168

SeaTech - Laboratoire MAPIEM - Université de Toulon

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period: from July 6th 2015 to July 5th 2016

- Member of the operating unit of the Project supported by "Ministero degli Affari Esteri, Direzione Generale per la Promozione del Sistema Paese", Italy - Progetto di Grande Rilevanza Italia-Egitto 2013-2016.

date: 17/04/2013; reference number: 0086091

CNR - National Research Council of Italy - Institute of Biomolecular Chemistry

Via Campi Flegrei, 34 - 80078, Pozzuoli (NA), Italy

period: from 2013 to 2016

- Work experience:

- Post-doc researcher

Main activities: "The role of Quorum Sensing in biofilm formation of selected strains"

Prof. Dr. Jaco Vangronsveld; Hasselt University; Environmental Biology; Centre of Environmental Sciences; Agoralaan, building D, B-3590 Diepenbeek, Belgio;

Phone: +32(0)11268331, Fax: +32(0)11268301, E-mail: jaco.vangronsveld@uhasselt.be
Hasselt University, Hasselt, Belgium

period: from April 1st 2015 to June 30th 2015

- Research fellow

Main activities: "Chemical (extraction and isolation) analysis and evaluation of biological activities (antioxidant, antimicrobial, antitumor) of metabolites from vegetable waste" as part of the research project "PON01_01966 ENERBIOCHEM "Filiere agro-industriali integrate ad elevata efficienza energetica per la messa a punto di processi di Produzione Eco-compatibili di Energia e Bio-chemicals da fonte rinnovabile e per la valorizzazione del territorio"

date: 13/02/2015; reference number: 0000831

CNR - National Research Council of Italy - Institute of Biomolecular Chemistry

Via Campi Flegrei, 34 - 80078, Pozzuoli (NA), Italy

period: from April 15th 2015 to June 14th 2015

- Researcher

Main activities: "Biochemical (nutritional) and microbiological (endophytic bacteria associated with plant roots) analysis of different tomato cultivars and new tomato hybrids" as part of the research project "Conoscenze Integrate per Sostenibilità e Innovazione del Made in Italy Agroalimentare" (CISIA)

date: 16/06/2014; reference number: 0002598

CNR - National Research Council of Italy - Institute of Biomolecular Chemistry

Via Campi Flegrei, 34 - 80078, Pozzuoli (NA), Italy

period: from June 16th 2014 to March 31st 2015

- Short Term Scientific Mission (COST Action FA1103) at Hasselt University, Hasselt, Belgium
Research topic: " The role for plant-associated endophytes in improving production and quality of tomato"

Supervisor: Prof. Dr. Jaco Vangronsveld; Hasselt University; Environmental Biology; Centre of Environmental Sciences; Agoralaan, building D, B-3590 Diepenbeek, Belgium;

Phone: +32(0)11268331, Fax: +32(0)11268301, E-mail: jaco.vangronsveld@uhasselt.be

Hasselt University, Hasselt, Belgium

reference number: COST-STSM-ECOST-STSM-FA1103-090914-049031

period: from September 9th 2014 to October 24th 2014

- Scientific stay at Hasselt University, Hasselt, Belgium

Research topic: "Plant-growth promotion – specific assay"

Supervisor: Prof. Dr. Jaco Vangronsveld; Hasselt University; Environmental Biology; Centre of Environmental Sciences; Agoralaan, building D, B-3590 Diepenbeek, Belgium;

Phone: +32(0)11268331, Fax: +32(0)11268301, E-mail: jaco.vangronsveld@uhasselt.be

Hasselt University, Hasselt, Belgium

period: from May 17th 2014 to July 10th 2014

- Scientific stay at Hasselt University, Hasselt, Belgium

Research topic: "Plant-growth promotion – specific assay"

Supervisor: Prof. Dr. Jaco Vangronsveld; Hasselt University; Environmental Biology; Centre of Environmental Sciences; Agoralaan, building D, B-3590 Diepenbeek, Belgium;

Phone: +32(0)11268331, Fax: +32(0)11268301, E-mail: jaco.vangronsveld@uhasselt.be

Hasselt University, Hasselt, Belgium

period: from March 31st 2014 to May 2nd 2014

- Scientific stay at Hasselt University, Hasselt, Belgium

Research topic: "Plant-growth promotion – specific assay"

Supervisor: Prof. Dr. Jaco Vangronsveld; Hasselt University; Environmental Biology; Centre of Environmental Sciences; Agoralaan, building D, B-3590 Diepenbeek, Belgium;

Phone: +32(0)11268331, Fax: +32(0)11268301, E-mail: jaco.vangronsveld@uhasselt.be

Hasselt University, Hasselt, Belgium

period: from January 7th 2014 to March 7th 2014

- Research fellow

Main activities: "Valorisation of agricultural crops typical of Campania Region: re-use of lemon oversupply and processing waste" as part of the agreement between *Regione Campania-Settore Sperimentazione, Informazione Ricerca e Consulenza in Agricoltura (se.S.I.R.C.A.)* and CNR-ICB

date: 18/12/2012; reference number: 0004452

CNR - National Research Council of Italy - Institute of Biomolecular Chemistry

Via Campi Flegrei, 34 - 80078, Pozzuoli (NA), Italy

period: from January 2nd 2013 to December 31st 2013

- Experimental PhD thesis in "Environment, Resources and Sustainable Development", Parthenope University of Naples - XXV Cycle, under the supervision of Dr. Giuseppina Tommonaro (Researcher of the Institute of Biomolecular Chemistry- C.N.R. – Pozzuoli - NA)
Joint PhD with Hasselt University, Hasselt, Belgium
CNR - National Research Council of Italy - Institute of Biomolecular Chemistry
Via Campi Flegrei, 34 - 80078, Pozzuoli (NA), Italy
period: from January 2010 to March 25th 2013

- Scientific stay as PhD student at Hasselt University, Hasselt, Belgium
Research topic: " Implication of Quorum Sensing in bioremediation processes: screening of signal molecules produced by a consortium of diesel degrading strains"
Supervisor: Prof. Dr. Jaco Vangronsveld; Hasselt University; Environmental Biology; Centre of Environmental Sciences; Agoralaan, building D, B-3590 Diepenbeek, Belgium;
Phone: +32(0)11268331, Fax: +32(0)11268301, E-mail: jaco.vangronsveld@uhasselt.be
Hasselt University, Hasselt, Belgium
period: from August 30th 2012 to November 1st 2012

- Scientific stay as PhD student at Hasselt University, Hasselt, Belgium
Research topic: " Implication of Quorum Sensing in bioremediation processes: screening of signal molecules produced by a consortium of diesel degrading strains"
Supervisor: Prof. Dr. Jaco Vangronsveld; Hasselt University; Environmental Biology; Centre of Environmental Sciences; Agoralaan, building D, B-3590 Diepenbeek, Belgium;
Phone: +32(0)11268331, Fax: +32(0)11268301, E-mail: jaco.vangronsveld@uhasselt.be
Hasselt University, Hasselt, Belgium
period: from June 1st 2012 to July 25th 2012

- Research fellow
Main activities: "Nutritional analysis and biological assays on new tomato hybrids extracts" as part of the research project "Conoscenze Integrate per Sostenibilità e Innovazione del Made in Italy Agroalimentare" (CISIA) - CUP B51J10001290001
date: 20/12/2011; reference number: 0003587
CNR - National Research Council of Italy - Institute of Biomolecular Chemistry
Via Campi Flegrei, 34 - 80078, Pozzuoli (NA), Italy
period: from March 1st 2012 to May 31st 2012

- Scientific stay as PhD student at Hasselt University, Hasselt, Belgium

Research topic: " Implication of Quorum Sensing in bioremediation processes: bacteria-plant association"

Supervisor: Prof. Dr. Jaco Vangronsveld; Hasselt University; Environmental Biology; Centre of Environmental Sciences; Agoralaan, building D, B-3590 Diepenbeek, Belgium;

Phone: +32(0)11268331, Fax: +32(0)11268301, E-mail: jaco.vangronsveld@uhasselt.be

Hasselt University, Hasselt, Belgium

period: from October 16th 2011 to December 16th 2011

- Scientific stay as visiting researcher at IGR - Institut de cancérologie Gustave Roussy, Villejuif, France; supported by Short-term mobility Program of CNR

Research topic: "The distribution of o,p'-DDD (Mitotane), o,p'-DDE and o,p'-DDA among serum lipoproteins"

date: 23/03/2011 ; reference number: 0025829

Supervisor: Angelo Paci (IGR, Villejuif), angelo.paci@igr.fr

IGR - Institut de cancérologie Gustave Roussy; 114, rue Edouard Vaillant; 94805 Villejuif, France

period: from April 20th 2011 to May 11th 2011

- Fellow worker

Main activities: Deliver of 3 lectures about bacterial communication to High School classes, collaborating with the Project "L'Istituto di Chimica Biomolecolare-Pozzuoli va a scuola e.....le scuole vanno all'Istituto di Chimica Biomolecolare" (MIUR, D.D. 19.07.2010 n.348/ric Legge 6/2000)

date: 17/02/2011 ; reference number: 0000433

CNR - National Research Council of Italy - Institute of Biomolecular Chemistry

Via Campi Flegrei, 34 - 80078, Pozzuoli (NA), Italy

period: from February 2011 to March 2011

- Research fellow

Main activities: "Evaluation of antioxidant activity and determination of anthocyanin content in processed products of tomato"; "Evaluation of antioxidant activity of plant extracts using spectrophotometric techniques. Methods to estimate flavonoid content."

date: 01/02/2011 ; reference number: 0001173

CNR - National Research Council of Italy - Institute of Biomolecular Chemistry

Via Campi Flegrei, 34 - 80078, Pozzuoli (NA), Italy

period: from June 1st 2010 to August 31st 2010

- Experimental thesis in Pharmaceutical Chemistry and Technology, Federico II University of Naples, under the supervision of Dr. Barbara Nicolaus (Senior Researcher of the Institute of Biomolecular Chemistry - CNR - Pozzuoli - NA)

CNR - National Research Council of Italy - Institute of Biomolecular Chemistry

Via Campi Flegrei, 34 - 80078, Pozzuoli (NA), Italy

period: from September 2008 to October 2009

- List of Bachelor, Master, Ph.D. dissertations supervised:

- A.A. 2010-2011, 2011-2012, 2012-2013. Support work on Ms. Rita Pergamo's Master Thesis in "Pharmaceutical Chemistry and Technology" (5 years), "Federico II" University of Naples. Main topic: "Evaluation of antioxidant activity and anthocyanin content of industrially processed tomato products".
- A.A. 2010-2011, 2011-2012, 2012-2013. Support work on Ms. Antonietta Tafuto's Master Thesis in "Medical Biotechnology" (5 years), "Federico II" University of Naples. Main topic: "Achievement of semi-derivatives of avarol, a natural sesquiterpenoid isolated from marine sponge *Dysidea avara*, with the aim to increase biological activities (cytotoxic, antioxidant, inhibition of Acetylcholinesterase)".
- A.A. 2011-2012. Support work on Ms. Giuseppina Ferrara's Bachelor Thesis in "Biological Sciences" (3 years), "Parthenope" University of Naples. Main topic: "Quorum Sensing in *Vibrio* spp. - Techniques for detection of Bacterial Autoinducers".
- A.A. 2012-2013. Support work on Ms. Marilina Visconti's Bachelor Thesis in "Biological Sciences" (3 years), "Parthenope" University of Naples. Main topic: "Isolation, chemical characterization and biological activities of avarol".

- Education:

- International Ph.D. in "Environment, Resources and Sustainable Development" (Label of Doctor Europaeus) - XXV Cycle at Parthenope University of Naples, under the supervision of Dr. Giuseppina Tommonaro (Researcher of the Institute of Biomolecular Chemistry- C.N.R. - Pozzuoli - NA)

Title of the Thesis: "The role of Quorum Sensing in marine bacteria, Archaea and inter-kingdom communication"

Joint PhD with Hasselt University, Hasselt, Belgium

UHasselt Tutor: Prof. Jaco Vangronsveld

Degree according to Flemish higher education structure: "Doctor of Science: Biology" within the field of study in Science

Parthenope University of Naples, Naples, Italy

Hasselt University, Hasselt, Belgium

date of defense: March 25th 2013

- Admitted to practice pharmacy (Professional qualification)

date: 13/04/2010; Matr. 007008039

provided by: "Federico II" University of Naples

session: December 2009 (second session of year 2009)

- Master Degree in "Pharmaceutical Chemistry and Technology" (5 years) with grade of 107/110

Thesis: "Purification and chemical characterization of secondary metabolites of *Adiantum capillus veneris* and their biological activity"

date: 21/10/2009; reference number: CE2009512527000090; Matr. 512001651

provided by: "Federico II" University of Naples

date of defense: October 19th 2009

- Diplôme d'études en langue française (DELF) 2nd Degré

date: 21/06/2004; Candidate number: 039081-001316

provided by: République française - Ministère de la jeunesse, de l'éducation nationale et de la recherche

exam location: Institut Français de Naples (Naples)

- Scientific High School Degree with grade 75/100

date: July 2003

provided by: Liceo scientifico statale "Tito Lucrezio Caro"

- Preliminary English test (PET) Certificate

date: 11/01/2002; reference number: 01BIT6125016

provided by: University of Cambridge, United Kingdom

exam location: Naples

session: November 2001

- Certificate Grade 6 with Merit: Spoken English for Speakers of Other Languages

date: May 2001

provided by: Trinity College London, United Kingdom

exam location: Naples

- Participation to the National Project:

“Integrated learning of language and content:

- English through science

- Air quality in the city of Naples”

Certificate of attendance, Course of 100 hours hosted by “Liceo scientifico statale - Tito Lucrezio Caro” and “Orto Botanico”, Naples

date: 07/03/2002; reference number: 936

Liceo scientifico statale “Tito Lucrezio Caro”

Via Alessandro Manzoni, 53; 80123; Naples

period: Academic year 2001/2002

- Publications:

- [1] Di Donato P., Poli A., Taurisano V., **Abbamondi G.R.**, Nicolaus B. and Tommonaro G., 2016. Recent advances in the study of marine microbial exopolysaccharides: from the involvement of quorum sensing in their production up to their biotechnological application. *Emerging Biomolecular Technologies in Marine Science*, 4(2), doi:10.3390/jmse4020034
- [2] **Abbamondi G.R.**, Suner S., Cutignano A., Grauso L., Nicolaus B., Toksoy Oner E. and Tommonaro G., 2016. Identification of N-Hexadecanoyl-L-homoserine lactone (C16-AHL) as signal molecule in halophilic bacterium *Halomonas smyrnensis* AAD6. *Annals of Microbiology*, pp 1-5, DOI: 10.1007/s13213-016-1206-6
- [3] **Abbamondi G.R.**, Tommonaro G, Weyens N, Thijs S, Sillen W, Gkorezis P, Iodice C, de Melo Rangel W, Nicolaus B, Vangronsveld J., 2016. Plant growth-promoting effects of rhizospheric and endophytic bacteria associated with different tomato cultivars and new tomato hybrids. *Chem. Biol. Technol. Agric.*, 3:1. DOI:10.1186/s40538-015-0051-3
- [4] W.M.A. Sillen, S. Thijs, **G.R. Abbamondi**, J. Janssen, N. Weyens, J.C. White, J. Vangronsveld, 2015. Effects of silver nanoparticles on soil microorganisms and maize biomass are linked in the rhizosphere. *Soil Biology and Biochemistry*, 91:14–22
- [5] P. Gkorezis, E.M. Bottos, J.D. Van Hamme, A. Franzetti, **G.R. Abbamondi**, M. Balseiro-Romero, N. Weyens, F. Rineau, J. Vangronsveld, 2015. Draft Genome Sequence of *Acinetobacter calcoaceticus* Strain GK1, a Hydrocarbon-Degrading Plant Growth-Promoting Rhizospheric Bacterium. *Genome Announcements*, July/August 2015 vol. 3 no. 4 e00909-15.
- [6] G. Tommonaro, R. De Prisco, R. Pergamo, C. Iodice, **G.R. Abbamondi**, A. Spagnuolo and B. Nicolaus, 2015. Effects of industrial processes on antioxidant power and polyphenols profile in cherry tomato cultivar. *Journal of Medicinal Food*, 18(10):1173-8.
- [7] G. Tommonaro, A. Poli, P. Di Donato, **G.R. Abbamondi**, I. Finore, B. Nicolaus, 2015.

- Bioactive polysaccharides of vegetable and microbial origins: an overview. In *Handbook of Polymers for Pharmaceutical Technologies - Section: Biodegradable Polymer*, Volume 3. DOI: 10.1002/9781119041450.ch1
- [8] G. Tommonaro, **G.R. Abbamondi**, E. Toksoy Oner and B. Nicolaus, 2015. Investigating the Quorum Sensing System in Halophilic Bacteria. D.K. Maheshwari, M. Saraf (eds.), *Halophiles: Biodiversity and Sustainable Exploitation, Sustainable Development and Biodiversity*, 6:189-207. ISBN 978-3-319-14594-5, DOI 10.1007/978-3-319-14595-2_7.
- [9] G. Tommonaro, A. Caporale, L. De Martino, A. Popolo, R. De Prisco, B. Nicolaus, **G.R. Abbamondi** and C. Saturnino, 2014. Antioxidant and cytotoxic activities investigation of tomato seed extracts. *Natural Product Research*, 28(10):764-768.
- [10] **G.R. Abbamondi**, S. De Rosa, C. Iodice and G. Tommonaro, 2014. Cyclic Dipeptides Produced by Marine Sponge-Associated Bacteria as Quorum Sensing Signals. *Natural Product Communications*, 9(2), 229-232.
- [11] G. Tommonaro, R. De Prisco, **G.R. Abbamondi**, and B. Nicolaus, 2013. Bioactivity of Tomato Hybrid Powder: Antioxidant Compounds and Their Biological Activities. *Journal of Medicinal Food*, 16(4) 351-356.
- [12] G. Tommonaro, **G.R. Abbamondi**, C. Iodice, K. Tait, S. De Rosa, 2012. "Diketopiperazines Produced by the Halophilic Archaeon, *Haloterrigena hispanica*, Activate AHL Bioreporters". *Microbial Ecology*, (63) 490-495.
- [13] G. Tommonaro, R. de Prisco, **G.R. Abbamondi**, S. Marzocco, C. Saturnino, A. Poli, and B. Nicolaus, 2012. Evaluation of Antioxidant Properties, Total Phenolic Content, and Biological Activities of New Tomato Hybrids of Industrial Interest". *Journal of Medicinal Food*, (5) 483-489.
- [14] A. Poli, P. Di Donato, **G.R. Abbamondi** and B. Nicolaus, 2011. "Synthesis, production and biotechnological applications of exopolysaccharides (EPSs) and poly-hydroxyalkanoates (PHAs) by *Archaea*". *Archaea*, Article ID 693253, 13 pages. DOI: 10.1155/2011/693253

- **Conferences:**

- [1] **G.R. Abbamondi**, 2013. Scarti da lavorazione del limone: recupero e valorizzazione / Lemon waste generated by processing industries: re-use and valorisation. *Giornata Scientifica: Ricerca applicata in campo agroalimentare - tra riciclo e sostenibilità / Scientific Day on Food and Agricultural Research: re-use and sustainability*. October 7th 2013, Procida-NA (ITALY). Main Oral Presentation - Member of the Organizing Committee.
- [2] **G.R. Abbamondi**, G. Tommonaro, R. De Prisco, R. Pergamo and B. Nicolaus, 2013. New Tomato Hybrids of Industrial Interest: Evaluation of Antioxidant Properties, Total Phenolic

- Content, and Biological Activities of Fresh Fruits and Transformed Products. *Proceedings of the 3rd International Conference on FOOD-OMICS*, May 22nd -24th 2013, Cesena (ITALY). pp 43-44, Poster. (ISBN 978-88-902152-3-0)
- [3] **G.R. Abbamondi**, G. Tommonaro, P. Gkorezis, B. Nicolaus and J. Vangronsveld, 2013. Implication of Quorum Sensing in bioremediation processes: screening of signal molecules produced by a consortium of diesel degrading strains. *Proceedings of the SDS 2013 - Sustainable Development Symposium*, February 13th-15th 2013, Naples, Italy, pp. 69-70, Poster. (ISBN 978-88-97893-28-8)
- [4] **G.R. Abbamondi**, G. Tommonaro, C. Iodice and S. De Rosa; Diketopiperazines produced by the halophilic archaeon, *Haloterrigena hispanica* activate AHL bioreporters; *MiCom2011*; September 13th-16th 2011, Jena- Germany; Invited Oral Presentation – supported by a grant
- [5] G. Tommonaro, **G.R. Abbamondi**, C. Iodice and S. De Rosa; Diketopiperazine isolated from bacteria associated with marine sponges involved in Quorum Sensing; *NatPharma: Nature Aided Drug Discovery 2011*; June 5th-8th 2011, Naples; Poster
- [6] I. Finore, G. Laezza, G. Anzelmo, **G.R. Abbamondi**, B. Nicolaus; Biodiversity of extreme environments. Extreme environments and extremophiles; *XXIII International Conference European Countries Biologists Association*; November 4th-7th 2010, Roma; Poster
- [7] **G.R. Abbamondi**, R. De Prisco, B. Nicolaus, G. Tommonaro; Il "Superpomodoro": tra innovazione scientifica e tradizione mediterranea; *III Congresso Nazionale "Qualità del Suolo, Alimenti, Salute"*; May 20th-22nd 2010, Naples; Oral Presentation

- **Awards:**

- Nunzio Pascale Award, June 2010, XVI Edition; Special award

Title of contribution: "Pharmacological activity of extracts and secondary metabolites of *Adiantum capillus veneris*"

Toulon (France), 04/06/2016

Dr. Gennaro Roberto Abbamondi