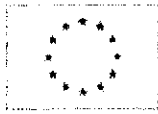


CURRICULUM VITAE



PERSONAL PROFILE

Surname, name **DE PLANO LAURA MARIA**
Address: street name, house number, postcode, city, country **VIA**
E-mail
Nationality
Date of birth: day, month, year
ORCID

EDUCATION

From 2016 to 2019 8th November 2019
Institute University of study of MESSINA
Title of qualification awarded Ph.D doctor in Applied Biology and Experimental Medicine
Title Thesis *Phage display as a tool for Marker Discovery, Diagnosis and Targeted Therapy.*

2014
Institute University of study of MESSINA
Title of qualification awarded Qualification to practice as a biologist
Registered in the National Register of Italian Biologists, section A
Senior Biologist

2013
Institute University of study of MESSINA
Title of qualification awarded Master's Degree in Biology
Vote 110 (su 110) e lode
Topic Biotechnology and Applied Microbiology
Title topic "One-step" capture and typing of microbial cells on phage-functionalized chips

2011
Institute University of study of MESSINA

Title of qualification awarded Bachelor's Degree in Biological Sciences
Vote 104 (su 110)
Title topic "Hepatitis C virus: Hepatocarcinoma and associated HCV neoplasms "

2003-2007

Institute State scientific high school "Lucio Piccolo" – Capo D'Orlando 98070 (ME).
Title of qualification awarded High school science certificate
Vote 97 (su 100)

RESEARCH EXPERIENCE

***From 9 May 2016 al
9 September 2016***

Institute University of study of MESSINA
Type of sector Project: "RIC_AID_2014"
Title topic "Production of diagnostic systems for monitoring risk factors and contamination in the food sector, with particular attention to the matrixes of the type fruit juices and juices of vegetable origin"
Activity **Junior Research Research grant**

***From 1 January 2014 to
31 December 2015 (24 mouths)***

Institute University of study of MESSINA
Type of sector CUF: B16C12000920005 PON02_00355_2964193
Title topic Project Hippocrates "Development of micro and nano-technologies and advanced systems for human health".
Activity **Junior Research Research grant**

From 2011 to today

Institute University of study of MESSINA
Fundamental and Applied Microbiology and Virology (MVFA);
Micro and Nano-Biotechnology Laboratory (M&Nbit)
Activity **Junior Research**
Research supervisor Associated Professor Guglielmino S.P.P.

PUBLICATIONS

2019

Scientific journal Gold Bulletin, Editor Springer

title "Study of gold nanoparticle transport by M13 phages towards

disease tissues as targeting procedure for radiotherapy applications”

DOI 10.1007/s13404-019-00266-w

Authors Name L. Torrisi, S. Guglielmino, L. Silipigni, L. M. De Plano, L. Kovacic, V. Lavrentiev, A. Torrisi, M. Fazio, B. Fazio, G. Di Marco.

2019

Scientific journal Viruses

title “Evolution of a Landscape Phage Library in a Mouse Xenograft Model of Human Breast Cancer”

Viruses 2019, 11, 988; doi:10.3390/v11110988

Authors Name James W. Gillespie, Liping Yang, Laura Maria De Plano, Murray A. Stackhouse and Valery A. Petrenko

2019

Scientific journal Applied Microbiology and Biotechnology

title “Glutamine-induced filamentous cells of *Pseudomonas mediterranea* 9.1 as producers of PHAs”

<https://doi.org/10.1007/s00253-019-10144-2>

Authors Name M.G. Rizzo, M.S. Nicolò, D. Franco, L.M. De Plano, V. Chines, F. Moscato, G. Crea, C. Gugliandolo and S.P.P. Guglielmino.

2019

Scientific journal Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy

title “Bio-hybrid gold nanoparticles as SERS probe for rapid bacteria cell identification”

Spectroscopy 224 (2020) 117394
<https://doi.org/10.1016/j.saa.2019.117394>

Authors Name D. Franco, L.M. De Plano, M.G. Rizzo, S. Scibilia, G. Lentini, E.Fazio, F. Neri, S.P.P. Guglielmino and A. M. Mezzasalma

2019

Scientific journal Viruses

title “Combinatorial Avidity Selection of Mosaic Landscape Phages Targeted at Breast Cancer Cells—An Alternative Mechanism of Directed Molecular Evolution”

Viruses 2019, 11, 785; DOI:10.3390/v11090785

Authors Name Valery A. Petrenko, James W. Gillespie, Hai Xu, Tiffany O’Dell

and L.M. De Plano

2019

Scientific journal Lecture Notes in Electrical Engineering

title "M13 bacteriophages as bioreceptors in biosensor device"

Sensors. CNS 2018. vol 539, Springer, Cham
DOI: https://doi.org/10.1007/978-3-030-04324-7_20

Authors Name L.M. De Plano, D. Franco, M.G. Rizzo, S. Crea, G. M. L. Messina, G. Marletta and S.P.P. Guglielmino

2019

Scientific journal Lecture Notes in Electrical Engineering,

title "One step" functionalization of silicon nanoparticles with phage probes to identify pathogenic bacteria"

Sensors. CNS 2018. vol 539, Springer, Cham
DOI: https://doi.org/10.1007/978-3-030-04324-7_21

Authors Name M.G. Rizzo, L.M. De Plano, S. Crea, D. Franco, S. scibilia, A. M. Mezzasalma and S.P.P. Guglielmino

2019

Scientific journal Lecture Notes in Electrical Engineering

title FITC-labelled clone from phage display for direct detection of leukemia cells in blood

Sensors. CNS 2018. vol 539, Springer, Cham
DOI: https://doi.org/10.1007/978-3-030-04324-7_22

Authors Name D. Franco, L. M. De Plano, M. G. Rizzo, S. Crea, E. Fazio, M. Bonsignore, F. Neri, A. Allegra, C. Musolino, G. Ferlazzo, S. Trusso, S. P. P. Guglielmino

2018

Scientific journal Journal of Immunological Methods

title Phage-based assay for rapid detection of bacterial pathogens in blood by Raman spectroscopy

Volume 465, February 2019, Pages 45-52
DOI: <https://doi.org/10.1016/j.jim.2018.12.004>

Authors Name L. M. De Plano, E. Fazio, M. G. Rizzo, D. Franco, S. Carnazza, S. Trusso, F. Neri, S. P. P. Guglielmino

2018

Scientific journal Applied Physics A: material science & Processing

title "Direct conjugation of Silicon nanoparticle with M13 pVIII engineered proteins to bacteria identification."

Applied Physics A (2018) 124:787
DOI 10.1007/s00339-018-2169-1

Authors Name L. M. De Plano, S. Scibilia, M. G. Rizzo, D. Franco, A.M. Mezzasalma, S. P. P. Guglielmino

2018

Scientific journal Chemical Communications

title Antiadhesive and antibacterial properties of pillar[5]arene-based multilayers

Chem. Commun., 2018,54, 10203-10206
DOI 10.1039/C8CC05659E

Authors Name Lucia Barbera, Laura M. De Plano, Domenico Franco, Giuseppe Gattuso, Salvatore P. P. Guglielmino, Gabriele Lando, Anna Notti, Melchiorre F. Parisi and Ilenia Pisagatti.

2018

Scientific journal Applied Physics A: material science & Processing

title “One step” production of phage-silicon nanoparticles by PLAL as fluorescent nanoprobes for cells identification

Applied Physics A (2018) 124:222
<https://doi.org/10.1007/s00339-018-1637-y>

Authors Name Laura M De Plano, Santi Scibilia, Maria Giovanna Rizzo, Sara crea, Domenico Franco, Angela M Mezzasalma, Salvatore Guglielmino

2017

Scientific journal COLLOIDS AND SURFACES B: BIOINTERFACES

title Specific and selective probes for Staphylococcus aureus from phage-displayed random peptide libraries

Colloids and Surfaces B: Biointerfaces 157 (2017) 473–480
<http://dx.doi.org/10.1016/j.colsurfb.2017.05.081>

Authors Name Laura M. De Plano, Santina Carnazza, Grazia M. L. Messina, Maria Giovanna Rizzo, Giovanni Marletta and Salvatore P. P. Guglielmino.

2017

Scientific journal Organic & Biomolecular Chemistry

title A water-soluble pillar[5]arene as a new carrier for an old drug

Org. Biomol. Chem., 2017,15, 3192
DOI: 10.1039/c7ob00530j

Authors Name Lucia Barbera, Domenico Franco, Laura M. De Plano, Giuseppe Gattuso, Salvatore P. P. Guglielmino, Germana Lentini, Nadia

Manganaro, Nino Marino, Sebastiano Pappalardo, Melchiorre F. Parisi, Fausto Puntoriero, Ilenia Pisagatti and Anna Notti

2016

Scientific journal Vibrational Spectroscopy
title "Rapid detection of *Pseudomonas aeruginosa* by phage-capture system coupled with micro-Raman spectroscopy"

S0924-2031(16)30089-3
<http://dx.doi.org/doi:10.1016/j.vibspec.2016.05.003>

Authors Name G. Lentini, D. Franco, E. Fazio, L.M. De Plano, S. Trusso, S. Carnazza, F. Neri, S.P.P. Guglielmino

2015

Scientific journal Biosensors and Bioelectronics
title "Phage-AgNPs complex as SERS probe for U937 cell identification"

Biosensors and Bioelectronics 74(2015)398–405
<http://dx.doi.org/10.1016/j.bios.2015.05.073>

Authors Name G. Lentini, E. Fazio, F. Calabrese, L.M. De Plano, M. Puliafico, D. Franco, M.S. Nicolò, S. Carnazza, S. Trusso, A. Allegra, F. Neri, C. Musolino, S.P.P. Guglielmino

2015

Scientific journal XVII AISEM, 2015
title "Phage-coated paramagnetic beads as selective and specific capture system for biosensor applications"

2015 XVIII AISEM Annual Conference
DOI: 10.1109/AISEM.2015.7066851

Authors Name F. Calabrese, S. Carnazza, L.M. De Plano, G. Lentini, D. Franco, S.P.P. Guglielmino

2015

Scientific journal Lecture Notes in Electrical Engineering
title "Progress Toward the Development of a Lytic Bacteriophages-Based Impedance Microbiology for Agro-Food Application"

Springer International Publishing Switzerland (2015) 319:83-87
DOI 10.1007/978-3-319-09617-9_15

Authors Name Alessia Mortari, Leandro Lorenzelli, Laura Maria De Plano, Marco Nicolò, Salvatore Guglielmino,

2013

Scientific journal "Nano TechItaly" 2013 Venice – Italy
title "Preconcentration and incubation analysis chambers integration: a

strategy for enhanced detection probability of viable Escherichia coli in milk

<http://hdl.handle.net/11582/211415>

Authors Name Moriari A, De Plano LM, Nicolò MS, Guglielmino S.P.P. and Lorenzelli L.

PATENT

2017

Patent number International patent application N. PCT/IB2017/057422 Ns. rif.: (E0112463)/BRE-RD/dt (ITALIA N. 102016000120204) DISTRETTO TECNOLOGICO SICILIA MICRO E NANO SISTEMI S.C.A.R.L.

Title Italian Mimotopi conformazionali per il rilevamento di anticorpi specifici
Title English "Conformational mimotopes for the detection of specific antibodies"

Authors Name S.P.P. Guglielmino, L.M. De Plano, S. Carnazza, D. Franco, A. Nicoletti, M. Zappia, S. conoci, S. Petralia.

CONFERENCE

2019 14-16 November 2019

International Congress: Bra Yn 2019: 2nd Brainstorming Research Assembly for Young Neuroscientists (Milan, Italy)

Poster title "Innovative approach to discover new markers of Alzheimer's Disease for state/stage diagnosis by Phage Display technology"

Authors Name M. G.Rizzo, Laura M. De Plano, S. Carnazza, D. Franco, S. Conoci, S. Petralia, A. Nicoletti, M. Zappia and S.e P.P. Guglielmino

2019 15-18 October 2019

International Congress: Meet in Italy in life science (Trieste)

Presentation title "Microbial amyloid mimotope from phage display as IgG biomarker for Alzheimer's disease"

Authors Name Laura M. De Plano and Salvatore Guglielmino.

2019 19-21 June 2019

International Congress: SIFB (Società Italiana di FotoBiologia) meeting on Photobiology Bologna (Italy)

Poster title “Fluorescent probes from phage display for myeloma molecular mapping”

Authors Name Domenico Franco, Laura De Plano, Maria Giovanna Rizzo, Enza Fazio, Martina Bonsignore, Fortunato Neri, Alessandro Allegra, Caterina Musolino, Guido Ferlazzo, and Salvatore Guglielmino.

2019 19-21 June 2019

International Congress: SIFB (Società Italiana di FotoBiologia) meeting on Photobiology Bologna (Italy)

Poster title “Nanocomplexes based on a cationic porphyrin and an anionic cyclodextrin with antimicrobial photodynamic properties”

Authors Name Roberto Zagami, James D. Pipkin, Vince Antle, Domenico Franco, Laura De Plano, Salvatore Patanè, Salvatore Guglielmino, Luigi Monsù Scolaro and Antonino Mazzaglia.

2018 24-28 September 2018

International Congress: International conference on Nanotecnologie and Bionanoscience (Heraklion, Greece)

Poster title “Promiscuous phage-peptide as possible approach to a multiple drug targeted therapy”

Authors Name L. M. De Plano, D. Franco, M. G. Rizzo, S. Carnazza, M. Nicolò, S. P. P. Guglielmino.

2018 24-28 September 2018

International Congress: International conference on Nanotecnologie and Bionanoscience (Heraklion, Greece)

Poster title “Phage-based capture and concentrating system for single step detection of pathogens in liquid samples”

Authors Name S. Trusso, L. M. De Plano, E. Fazio, M. G. Rizzo, D. Franco, S. Carnazza, F. Neri, S. P. P. Guglielmino.

2018 14-17 June 2018

International Congress: 23rd European Hematology Association (EHA)- Stockholm (Sweden)

Poster title “Raman spectroscopy is able to discriminate between cd138/cd138+ plasma cells of multiple myeloma patients.”

Authors Name A. Allegra, O. Bianco, E. Fazio, M. Bonsignore, F. Neri, G. Ferlazzo, S. Trusso, D. Franco, L. M. De Plano, M. G. Rizzo, S. Carnazza, S. P. P. Guglielmino, C. Musolino

2018 21-22 FEBRUARY 2018

National Congress: CNS 2018 (Sensor National Conference) Catania (Italy)

Poster title “M13 bacteriophages as bioreceptors in biosensor device”

Authors Name L.M. De Plano, D. Franco, M.G. Rizzo, S. Crea, G. M. L. Messina, G. Marletta and S.P.P. Guglielmino

2018 21-22 FEBRUARY 2018

National Congress: CNS 2018 (Sensor National Conference) Catania (Italy)

Poster title “Raman spectroscopy analysis on plasma cell immune-phenotypes from patient affected by multiple myeloma”

Authors Name E. Fazio, M. Bonsignore, F. Neri, A. Allegra, C. Musolino, G. Ferlazzo, S. Trusso, D. Franco, L. M. De Plano, M. G. Rizzo, S. Crea, and S.P.P. Guglielmino

2018 21-22 FEBRUARY 2018

National Congress: CNS 2018 (Sensor National Conference) Catania (Italy)

Oral presentation title “one step” functionalization of silicon nanoparticles with phage probes to identify pathogenic bacteria”

Authors Name M.G. Rizzo, L.M. De Plano, S. Crea, D. Franco, S. scibilia, A. M. Mezzasalma and S.P.P. Guglielmino

2018 21-22 FEBRUARY 2018

National Congress: CNS 2018 (Sensor National Conference) Catania (Italy)

Oral presentation title FITC-labelled clone from phage display for direct detection of leukemia cells in blood

Authors Name D. Franco, L. M. De Plano, M. G. Rizzo, S. Crea, E. Fazio, M. Bonsignore, F. Neri, A. Allegra, C. Musolino, G. Ferlazzo, S. Trusso, S. P. P. Guglielmino

2017 17-20 SEPTEMBER 2017

International Congress: SIMGBM Congress 2017 (Italian company of microbiology and biotechnology) Palermo (Italy)

Poster title “Computation of structure-specific parameter to perform biofilm structure patterns”

Authors Name L.M. De Plano, M.G. Rizzo, D. Franco, M. Caratozzolo, M. Frasca, L. Fortuna and S.P.P. Guglielmino

2017 17-20 SEPTEMBER 2017

International Congress: SIMGBM Congress 2017 (Italian company of microbiology and biotechnology) Palermo (Italy)

Poster title “Production of phenoxy-substituted poly(3-hydroxyalkanoates) (PHA) by *Pseudomonas mediterranea*”

Authors Name M.G. Rizzo, L.M. De Plano, D. Franco, M.S. Nicolò A. ballistreri, G. Impallomeni and S.P.P. Guglielmino

2017 17-20 SEPTEMBER 2017

International Congress: SIMGBM Congress 2017 (Italian company of microbiology and biotechnology) Palermo (Italy)



Poster title "Filamentation as evolutive strategy in *Pseudomonas mediterranea*"

Authors Name D. Franco, M.G. Rizzo, L.M. De Plano, G. Crea, F. Moscato, M.S. Nicolò and S.P.P. Guglielmino

2017 3-8 SEPTEMBER 2017

International Congress: COLA 2017 (International Conference on Laser Ablation)
Marseille (France)

Poster Title "One step production of Phage-silicon nanoparticles by PLAL as quantum dots nanoprobe for cells identification"

Authors Nome L.M. De Plano, S. Scibilia, M.G. Rizzo, S. Crea, A.M. Mezzasalma and S.P.P. Guglielmino

2016 19-21 OCTOBER 2016

International Congress: THE LANCET Neurology conference
(preclinical neurodegenerative disease: towards prevention and early diagnosis). London, UK.

Poster Title "A new approach for biomarker discovery in Alzheimer's disease"

Authors Nome L. M. De Plano, S. Carnazza, D. Franco, A. Nicoletti, M. Zappia, S. Conoci, S. Petralia, S. P. P. Guglielmino.

2015

National Congress: Workshop Hippocrates - Messina

Poster Title "Malattie Infettive: test molecolare per la sepsi"

Authors Nome Guglielmino S.P. P., Mezzasalma A., Franco D., De Plano L. M., Carnazza S., Calabrese F., Lentini G., Rizzo M.

2015

National Congress: Workshop Hippocrates - Messina

Poster Title "Malattie neurodegenerative: test su marker proteici"

Authors Nome Guglielmino S. P. P., Carnazza S., De Plano L.M., Zappia M., Nicoletti A., Le Pira F., Dibilio V., Luca A., Sanfilippo C.

2015

International Congress: EMRS - Lille

Oral Presentation Title "Phage-based biosensor for rapid detection of bacterial pathogen in blood"

Authors Nome G. Lentini, F. Calabrese, S. Carnazza, L.M. De Plano, D. Franco, E. Fazio, S. Trusso, F. Neri and S.P.P. Guglielmino

2015

International Congress: XVIII AISEM- Fondazione Bruno Kessler

Poster Title "Phage-coated paramagnetic beads as selective and specific capture system for biosensor applications"

Authors Nome F. Calabrese, S. Carnazza, L.M. De Plano, G. Lentini, D. Franco,

S.P.P. Guglielmino

2014

International Congress: 16th European Congress on Biotechnology ECB16
Poster Title "Phage display as a tool for rapid in vitro cell characterization by fluorescence imaging and Raman spectroscopy"

Authors Nome L. M. De Plano, F. Calabrese, G. Lentini, M.S. Nicolò, D. Franco, E. Fazio, S. Trusso, A. Allegra, F. Neri, S.P.P. Guglielmino

2014

International Congress: "Nano TechItaly" 2013 Venice – Italy
Oral presentation Title "Preconcentration and incubation analysis chambers integration: a strategy for enhanced detection probability of viable *Escherichia coli* in milk"

Authors Nome Mottari A, De Plano LM, Nicolò MS, Guglielmino S.P.P. and Lorenzelli L.

AWARD

2018 21-22 FEBRUARY 2018

BEST POSTER AWARD

Poster CNS 2018 (Sensor National Conference) Catania (Italy)
Best poster award CNS2018

title "M13 bacteriophages as bioreceptors in biosensor device"

Authors Name L.M. De Plano, D. Franco, M.G. Rizzo, S. Crea, G. M. L. Messina, G. Marletta and S.P.P. Guglielmino

TRAINING COURSE

16, 17 e 18 Dicembre 2015

Training course "Venous and microbiological samples - first aid course
Institute: Policlinico of Palermo, Medicine and Surgery department
qualification achieved: Authorization for venous samples.

7 September 2015

Training course Integrated Skills in English
Entry level certificate in ESOL international (Entry 3)
Reading and writing skills- Merit
Speaking and Listening skills- Pass

Institute: Trinity College London
qualification achieved: International Certificate ISE 1

28 May 2015

Training course Computer license NUOVA-ECDL
Institute: AICA (Italian association for information and automatic

calculation)
qualification achieved: ECDL-full Standard, ECDL-standard, ECDL-IT Security

5 June 2013

Training course Computer license of maintenance of computer privacy of personal and sensitive patient data.

Institute: AICA (Italian association for information and automatic calculation)

qualification achieved: Certificate ECDL-Health

academic year 2011/2012

Training course Risk and safety in scientific laboratories in accordance with Legislative Decree n.626 / 94, 16th (academic year 2011/2012)

ALLEGATI:

- Copie conformi agli originali degli abstracts dei lavori scientifici pubblicati
- Copie conformi agli originali degli abstracts dei lavori scientifici presentati a congresso

DECLARATION

I do hereby declare that the above furnished information is true to the best of my knowledge.

DATA: 20/11/19

(Laura Maria De Plano)
FIRMA

