



VERBALE N. 2

Commissione giudicatrice del Concorso di selezione per n. 1 assegno per lo svolgimento di attività di ricerca di categoria A Tipologia II della durata di 1 anno per il seguente settore scientifico disciplinare: BIO/03 - Botanica Ambientale e Applicata, appartenente al SC 05/A1 - Botanica presso il Dipartimento di Biologia Ambientale dell'Università degli Studi di Roma "La Sapienza", Bando n. 182, protocollo n. 4435/2022 del 25/11/2022, del Direttore del Dipartimento di Biologia Ambientale, con la presentazione diretta da parte dei candidati del progetto di ricerca.

Il giorno 9 febbraio 2023 alle ore 17.00 tutti i componenti della commissione sono collegati in via telematica tramite la piattaforma Google Meet <https://meet.google.com/rqh-crod-eru>

La Commissione, nominata con decreto n. 11 -protocollo n. 48/23 dell'11/01/2023, del Direttore del Dipartimento di Biologia Ambientale è composta da:

Prof.ssa Gabriella Pasqua - PO BIO/01 (Presidente)
Prof.ssa Anna Maria Persiani - PA BIO/03 (Segretario)
Prof.ssa Laura Varone – PA BIO/03 (Componente)

Il Presidente informa la Commissione di aver acquisito dal responsabile del procedimento l'elenco dei candidati alla procedura selettiva e la documentazione in formato elettronico trasmessa dagli stessi.

La Commissione giudicatrice dichiara sotto la propria responsabilità che tra i componenti della Commissione ed i candidati non sussistono rapporti, di parentela o di affinità, fino al quarto grado compreso, né altre situazioni di incompatibilità ai sensi degli artt. 51 e 52 del Codice di Procedura Civile e dell'art. 18, primo comma, lett. b) e c), della legge 30 dicembre 2010, n. 240.

Il candidato alla procedura selettiva risulta essere il seguente:

1. Veronica Spinelli

Candidato: Veronica Spinelli

Curriculum

EDUCATION AND TRAINING

01/11/2018 – 30/05/2022 – Rome, Italy

PHD PROGRAMME IN ENVIRONMENTAL AND EVOLUTIONARY BIOLOGY.
CURRICULUM OF BOTANY – Sapienza University of Rome



PhD project aimed at identifying fungal strains with activity of plant growth promotion, bioprotection, biostimulation and bioremediation.

Thesis: "Bioresources for a sustainable agriculture: potentialities of Minimedusa polyspora and Chaetomium globosum as plant growth promoting fungi"

Excellent with honors EQF level 8

12/2014 – 03/2017 – Rome, Italy

MASTER'S DEGREE IN ENVIRONMENTAL MONITORING AND RECOVERY – Sapienza University of Rome

Thesis: Solubilization of tricalcium phosphate by soil saprotrophic microfungi as potential biofertilizers

110/110 cum laude EQF level 7

10/2011 – 12/2014 – Rome, Italy

BACHELOR'S DEGREE IN ENVIRONMENTAL SCIENCES – Sapienza University of Rome

Thesis: Structural geomorphology of landscapes north of Terni

110/110 cum laude EQF level 6

WORK EXPERIENCE

01/09/2022 – 31/01/2022 – Rome, Italy

Co.Co.Co. CONTRACT – Sapienza University of Rome – Department of Environmental Biology

Support to research activities aimed at the identification and selection of fungal strains isolated from contaminated soils, through suitable screening for the evaluation of their potential in mycoremediation, as part of the research project "Bioremediation:

caratterizzazione di comunità microbiche da suoli contaminati ". Set up of experiments with selected fungal strains to evaluate their potential for biodegradation of target pollutants.

24/01/2022 – 23/02/2022 – Rome, Italy

TUTOR FREELANCE CONTRACT – Sapienza University of Rome – Department of Environmental Biology

Self-employment contract of an occasional nature concerning the activity of: Orientation activities for secondary school students; Preparation of laboratory experiences on plant material; Preparation of didactic material to support the activities envisaged by the PLS for the Degree Program in Environmental Sciences and by the PCTO projects relating to the degree program, relating to the PLS 2020-2021 research project.

09/06/2021 – 30/09/2021

TUTORING CONTRACT– Sapienza University of Rome – Department of Environmental Biology

Main activities and responsibilities: Preparation of promotional brochures and didactic material for the Environmental Sciences bachelor's degree course, participation in orientation events, support for the organization of presentation events of the Environmental Sciences degree.

02/12/2019 – 31/01/2020 – Rome, Italy



TUTORING CONTRACT– Sapienza University of Rome – Department of Environmental Biology

Main activities and responsibilities: Tutoring and counseling activity for the students of the bachelor's degree in Environmental Sciences.

30/09/2019 – 02/12/2019 – Rome, Italy

CO.CO.CO. – Sapienza University of Rome – Department of Environmental Biology

Main activities and responsibilities: Preparation of promotional brochures and didactic material to support the activities foreseen by the L32 Scientific Degrees Project, for the Environmental Sciences bachelor's degree courses.

16/04/2019 – 31/07/2019 – Rome, Italy

TUTORING CONTRACT IN BOTANY PRACTICALS – Sapienza University of Rome – Department of Environmental Biology

Main activities and responsibilities: Tutoring assignment during practicals of the "Morpho-functional Botany" course of the bachelor's degree in Environmental Sciences.

02/05/2018 – 31/10/2018 – Rome, Italy

POST-GRADUATE RESEARCH INTERNSHIP FOUNDED BY TORNO SUBITO FELLOWSHIP – Sapienza University of Rome

Main activities and responsibilities: Research activities on the application of fungal strains for mycoremediation and plant growth promotion, and drafting of scientific publications.

01/11/2017 – 30/04/2018 – Wageningen, Netherlands

POST-GRADUATE RESEARCH INTERNSHIP FOUNDED BY TORNO SUBITO FELLOWSHIP – Wageningen University & Research

Main activities and responsibilities: Support in research activities, analysis and sampling activities. Acquisition of technical skills regarding methods of analysis concerning soil quality and ecology.

02/2016 – 04/2016 – Rome, Italy

INTERNSHIP – Servizio Bonifica Dei Siti Inquinati E Geologia Ambientale - Roma Capitale

Main activities and responsibilities: Control and reorganization of paperworks of polluted sites; database implementation.

PUBLICATIONS

Biostimulant effects of *Chaetomium globosum* and *Minimedusa polyspora* culture filtrates on *Cichorium intybus* plant: growth performance and metabolomic traits. Spinelli V., Brasili E., Sciubba F., Ceci A., Giampaoli O., Micheli A., Pasqua G., & Persiani A.M. (2022) *Frontiers in Plant Science*, 1351. <https://doi.org/10.3389/fpls.2022.879076>

Glyphosate-eating fungi: study on fungal saprotrophic strains' ability to tolerate and utilise glyphosate as a nutritional source and on the ability of *Purpureocillium lilacinum* to degrade it. Spinelli, V., Ceci, A., Dal Bosco, C., Gentili, A., & Persiani, A. M. (2021). *Microorganisms*, 9(11), 2179. <https://doi.org/10.3390/microorganisms9112179>



Fungi and arsenic: tolerance and bioaccumulation by soil saprotrophic species. Ceci, A., Spinelli, V., Massimi, L., Canepari, S., & Persiani, A. M. (2020). *Applied Sciences*, 10(9), 3218.
<https://doi.org/10.3390/app10093218>

Values and challenges in the assessment of coprophilous fungi according to the IUCN Red List criteria: The case study of *Poronia punctata* (Xylariales, Ascomycota). Ceci, A., Angelini, P., Iotti, M., Lalli, G., Leonardi, M., Pacioni, G., Perrone, L., Pioli, S., Siniscalco, C., Spinelli, V., Venturella, G., Wagensommer, R. P., Zotti, M., & Persiani, A. M. (2020). *Plant Biosystems* 1–5.
<https://doi.org/10.1080/11263504.2020.1813833>

New insights on the occurrence and conservation status in Italy of *Alessioporus ichnusanus* (Boletaceae), an IUCN red listed mycorrhizal species. Angelini, P., Antonini, D., Antonini, M., Arcangeli, A., Bianco, P. M., Bistocchi, G., Campana, L., Ceci, A., Floccia, F., Gargano, M. L., Gelardi, M., Lalli, G., Leonardi, M., Maneli, F., Perini, C., Perrone, L., Salerni, E., Segneri, G., Siniscalco, C., Spinelli, V., Vasquez, G., Venanzoni, R., Venturella, G., Wagensommer, R. P., Zotti, M., & Persiani, A. M. (2020). *Plant Biosystems*.1–4.
<https://doi.org/10.1080/11263504.2020.1813832>

PRESENTATIONS

Fungal-derived biostimulants boosting *Cichorium intybus*: effects of *Chaetomium globosum* and *Minimedusa polyspora* culture filtrates on growth performance and metabolomic traits Spinelli V., Brasili E., Sciubba F., Ceci A., Micheli A., Pasqua G., Persiani A. M.. Poster presentation at 117° Congresso della Società Botanica Italiana - VIII INTERNATIONAL PLANT SCIENCE CONFERENCE (IPSC) Book of Abstract: ISBN: 978-88-85915-27-5, Bologna, Italy, 7–10 September 2022. (Presenting author)

Fungal diversity for bioremediation: Tackling co-contaminations in a decommissioned military site Giovannini R., Ceci A., Spinelli V., Maggi O., Persiani A. M.. Poster presentation at 117° Congresso della Società Botanica Italiana - VIII INTERNATIONAL PLANT SCIENCE CONFERENCE (IPSC) Book of Abstract: ISBN: 978-88-85915-27-5, Bologna, Italy, 7–10 September 2022. (Presenting author)

The (in)visible side of biostimulation: application of 1H-NMR to reveal the biostimulating effect of *Minimedusa polyspora* and *Chaetomium globosum* culture filtrates on *Cichorium intybus* plants. Spinelli V., Brasili E., Sciubba F., Ceci A., Micheli A., Pasqua G., Persiani A. M.. Oral presentation at Riunione annuale dei Gruppi di Lavoro "Biologia cellulare e molecolare e Biotecnologie e Differenziamento", Book of Abstract: ISBN: 978-88-85915-26-8, Rome, Italy, 15–17 June 2022. (Presenting author).

A fungal solution to a fungal problem: *Chaetomium globosum* and *Minimedusa polyspora* potential in the biocontrol of plant pathogenic fungi Spinelli V., Ceci A., Giovannini R., Persiani A. M.. Oral presentation at XXIII Convegno Nazionale di Micologia, Perugia, Italy, 9–10 June 2022. (Presenting author)

Tackling co-contaminations: potentialities of soil fungi isolated from a decommissioned military site. Giovannini R., Ceci A., Spinelli V., Maggi O., Persiani A. M.. Oral presentation at XXIII Convegno Nazionale di Micologia, Perugia, Italy, 9–10 June 2022. (Presenting author)



Fungi handling phosphorus: soil fungi ability to solubilise inorganic phosphate and mediate secondary minerals formation Spinelli V., Ceci A., Pinzari F., Felici B., Persiani A. M.. Poster presentation at New Topics in Mineralogy 2: The mineral–microbe interface through time and space – The Mineralogical Society, online meeting, 2–3 /12/2021. (Presenting author)

Glyphosate-eating Fungi: Potentiality Of Saprotrophic Fungi To Break Down Glyphosate And Utilise It As Nutritional Source Spinelli V., Ceci A., Dal Bosco C., Gentili A., Persiani A. M.. Poster presentation at World Microbe Forum, Online, 20–24 June 2021. (Presenting author)

Fungal bioresources to increase secondary metabolites production: elicitation effect on *Chicorium intybus* hairy roots by *Chaetomium globosum* culture filtrate Spinelli V., Brasili E., Sciubba F., Ceci A., Miccheli A., Pasqua G., Persiani A. M.. Oral presentation at 115° Congresso della Società Botanica Italiana, Book of Abstract: ISBN: 978-88-85915-24-4, Online, 9–11 September 2020. (Presenting author)

Boosting plant growth: fungal metabolites as biostimulants for growth promotion of *Hypericum perforatum* (L.) Spinelli V., Sciubba F., Ceci A., Valletta A., Brasili E., Miccheli A., Pasqua G., Persiani A. M.. Poster presentation at 15th European Conference on Fungal Genetics (ECFG), Rome, Italy, 17–20 February 2020. (Presenting author)

What it takes to be a plant growth promoter: characterization of two strains of soil saprotrophic fungi *Minimedusa polyspora* and *Chaetomium globosum* Spinelli V., Ceci A., Pinzari F., Persiani A. M.. Oral presentation at CYBO 2020 - 1 Conference of young botanists Genoa.

6-7 February 2020 (Presenting author)

The newly established fungal collection and the research on medicinal mushrooms at the School of Pharmaceutical Science and Technology, Tianjin University, China Pecoraro L., Clark B., Ceci A., Spinelli V., Persiani A. M., Marchisio M. A., Borris R. P.. Oral presentation at The 10 International Medicinal Mushroom Conference, Nantong, China, 19–22 September 2019. (Presenting author)

Rhizo-bioremediation of DDT-contaminated soils. Malusà E., Tartanus M., Miszczak A., Russo F., Ceci A., Spinelli V., Maggi O., Furmańczyk E., Persiani A. M.. Poster presentation at 18th Congress of European Mycologists, Book of Abstract: ISBN 978-83-940504-5-0, Warsaw-Białowieża, Poland, 16–21 September 2019. (Presenting author)

Potential in mycoremediation of soil saprotrophic fungi: arsenic uptake and tolerance in different nutritional conditions. Ceci A., Spinelli V., Massimi L., Canepari S., Persiani A. M.. Poster presentation at 18th Congress of European Mycologists, Book of Abstract: ISBN 978-83-940504-5-0, Warsaw-Białowieża, Poland, 16–21 September 2019. (Presenting author)

Fungi and arsenic: tolerance and bioaccumulation by soil Ceci A., Spinelli V., Massimi L., Guadagnino S., Canepari S., Persiani A. M.. Poster presentation at 114° Congresso della Società Botanica Italiana (VI International Plant Science Conference), Book of Abstract: ISBN: 978-88-85915-23-7, Padova, Italy, 4–7 September 2019. (Presenting author)



Biodiversity of fungi as bioresources to face diversity of soil threats. Ceci A., Spinelli V., Russo F., Maggi O., Persiani A.M.. Oral presentation at ECCO 2019 XXXVIII Annual Meeting of the European Culture Collections' Organisation Turin 12-14 June 2019 (Presenting author)

Study of TCP solubilization by some soil microfungi and evaluation of their potential as efficient plant growth-promoting organisms for Glycine max Ceci A., Pinzari F., Spinelli V., Russo F., Maggi O., Persiani A. M.. Poster presentation at 113° Congresso della Società Botanica Italiana (V International Plant Science Conference), Book of Abstract: ISBN 978-88-85915-22-0, Fisciano Campus Universitario, Italy, 12–15 September 2018. (Presenting author)

Verso un'agricoltura sostenibile: potenzialità dei funghi saprotrofi del suolo nella solubilizzazione del tricalciofosfato Spinelli V., Ceci A., Pinzari F., Russo F., Felici B., Maggi O., Persiani A. M.. Oral presentation at XXII Convegno Nazionale di Micologia, Siena, Italy, 6–8 September 2018. (Presenting author)

Evaluation of soil microfungi as efficient plant growth-promoting organisms for P mobilization for Glycine max Ceci A., Pinzari F., Spinelli V., Russo F., Maggi O., Persiani A. M.. Poster presentation at 3rd European Sustainable Phosphorus Conference 2018 (ESPC3), Helsinki, Finland, 11–13 June 2018. (Presenting author)

COURSES

21/11/2022 – 19/12/2022 – 2° WORKSHOP INTRODUZIONE ALL'ANALISI DEI DATI VEGETAZIONALI CON R 20-hours online course organised by Società Botanica Italiana, Gruppo di Lavoro per la Vegetazione

2, 5-6/12/2022 – V° CORSO MICROSCOPIA ELETTRONICA E CONFOCALE IN AMBITO BOTANICO. Organised by the Italian Society for Microscopical Sciences, Modena - Area scientifica di Via Campi 22/06/2022

– 24/06/2022 – BASIC NEXT GENERATION SEQUENCING (NGS) PROCEDURES. Organised by Alta Formazione Insubria

07/11/2021 - AN INTRODUCTION TO FOOD SYSTEMS: SCIENTIFIC, TECHNICAL AND SOCIOECONOMIC PRINCIPLES TO FACILITATE THE CREATION OF FOOD VALUE NETWORKS. European Institute of Innovation & Technology (EIT) Food' MOOC (16 hours) on the online platform FutureLearn certificate number: futurelearn.com/certificates/3t49rjh

30/09/2021 – 02/10/2021 - SIMBA TRAINING COURSE 2: REGULATION, LEGISLATION & SAFETY OF BIOSTIMULANTS AND BIOFERTILISERS, INCLUDING NANO-FORMULATES. Organised by University of Parma – SITEIA.PARMA, Venice -Centro culturale Don Orione Artigianelli

24/05/2021 – 27/05/2021 - SUMMER SCHOOL IN INTRODUZIONE ALL'ANALISI DEI DATI CON R Organised by Sapienza University of Rome , Department of Psicologia dei Processi di Sviluppo

06/05/2021 – 07/05/2021 - IL SOFTWARE R - CORSO AVANZATO. Organised by Alta Formazione Insubria 08/06/2020 – 17/06/2020 - SUMMER SCHOOL "GLOBAL FOOD



VENTURE PROGRAMME – STAGE I SUMMER SCHOOL". Organised by European Institute of Innovation & Technology (EIT) Food

07/01/2020 - INTRODUCTION TO IMPORTING DATA IN R 3 hours online course on Datacamp

**2-6-7/01/2020 - DATA VISUALIZATION WITH GGLOT2 (PART 1-2-3)
16 hours online course on Datacamp**

11/02/2019 - INTERMEDIATE R 6 hours online course on Datacamp

13/01/2019 – INTRODUCTION TO R 4 hours online course on Datacamp

08/05/2017 – 31/05/2017 - TRAINING TO TALENT. Organised by Manageritalia Roma & Centro di Formazione Management del Terziario Postgraduate training course (80 hours) on soft skills. Topics: Team building, negotiation, problem solving, effective communication

LANGUAGE SKILLS

Mother tongue(s): ITALIAN

Other language(s): ENGLISH C1 (IELTS academic certification OVERALL SCORE 7.5)

FUNDED RESEARCH PROJECTS AS PRINCIPAL INVESTIGATOR

2021 - Sapienza university's research starting grant - type II number AR22117A8B4B45A5

Project title "A fungal solution to a fungal problem: applying fungal strains for the biocontrol of plant pathogenic fungi"

2020 - Sapienza university's research starting grant - type I number AR120172B8AA7160

Project title "Life inside: Analysis of Hypericum perforatum fungal endophytes"

HONOURS AND AWARDS

FEMS Congress Attendance Grant – Federation of European Microbiological Societies (FEMS)

FEMS Congress Attendance Grant to cover registration expenses to attend World Microbe Forum, June 20-24,2021, a joint digital between ASM Microbe 2021 and FEMS2021.

**Best communication of applicative interest Award at XXIII Convegno Nazionale di Micologia
Award for the best communication of applicative interest at XXIII Convegno nazionale di Micologia, Perugia 9-10 June 2022**

SBI Congress Attendance Grant – Società Botanica Italiana (SBI)

Congress Attendance Grant to cover registration and travel expenses to attend the 117° Congresso della Società Botanica

Italiana - VIII International Plant Science Conference, Bologna 7-10 September 2022

CONFERENCES AND SEMINARS

30/11/2018 - Matching fungal conservation in Italy: the current state and future challenges – Rome, Italy Member of the organizing committee of the Workshop

SKILLS Research Skills Research design and execution, writing scientific reports and articles, grant proposal writing, statistical analysis, data visualization. Main techniques applied: Soil sampling, isolation of the culturable fraction of the microbial community from soil and plant, DNA extraction by commercial kit, cultivation techniques, tolerance / resistance tests, tests for



the production of siderophores, tests to evaluate the production of biosurfactants, coculture tests of fungal strains and VOC inhibition to evaluate the potential of strains in biocontrol, preparation of extracts from plant and fungal matrices, seeds germination and elongation tests, preparation of experiments under controlled conditions and evaluation of plants morphofunctional parameters, preparation of plant and fungal samples for chemical analysis by acid digestion and extraction, spectrophotometric analyzes.

Digital Skills

Good skills in operating systems and database administration. Excellent skills in word processing, internet, electronic spreadsheet, digital photography and multimedia (audios, pictures, videos) editing. Software applications: Envi, AutoCAD (2D), Photoshop cs2, GIMP, ImageJ, R, G Suite, QGIS Proficient with Microsoft Office Suite, particularly Word, Excel and Power Point, Good knowledge of R, Zotero and Mendeley Bibliographic Management. Tool Social networks: Facebook, Instagram, Twitter and LinkedIn Soft Skills Creative thinking, effectiveness and productivity aimed at obtaining relevant results. Excellent strategic planning and programming skills combined with great problem-solving abilities. Very good teamwork and social skills, as well as ability to work independently. Capacity to take responsibility as coordinator and leader in the workplace. Excellent verbal and written communication and interpersonal skills, acquired during the participation in national and international congresses as well as during teaching and supervision of academic students. Empathic listening, assertiveness and ability to adapt communication style to different situations.

DRIVING LICENCE

Driving Licence: B

Tematiche di ricerca affrontate dal candidato e attinenti al tema del bando:

Dall'esame dei titoli e delle pubblicazioni la Commissione rileva che la formazione scientifica e l'attività di ricerca della candidata sono del tutto inerenti al SSD BIO/03. Pertanto, la Commissione tenuto conto dei criteri precedentemente adottati assegna i seguenti punteggi:

Candidato: Veronica Spinelli

Laurea	punti	5
Dottorato di Ricerca	punti	15
Corsi di perfezionamento post-laurea	punti	5
Attività di ricerca e formazione	punti	5
Pubblicazioni	punti	25
Totale titoli	Punti	55

E 'pertanto ammessa al colloquio la seguente candidata:

Candidata: Veronica Spinelli

La Commissione termina i propri lavori alle ore 18.15

Il presente verbale viene approvato e sottoscritto seduta stante.



I membri della Commissione

F.TO Prof.ssa Gabriella Pasqua

F.TO Prof.ssa Anna Maria Persiani

F.TO Prof.ssa Laura Varone