



Consiglio Nazionale delle Ricerche

PUBBLICAZIONE, AI SENSI DELL'ART.19 DEL D.LGS N. 33 DEL 14 MARZO 2013, MODIFICATA DAL D.LGS 25 MAGGIO 2016 N 97/2016, E INTEGRATA DALL'ART.1 COMMA 145 DELLA LEGGE 27 DICEMBRE 2019 N. 160, DELLE TRACCE D'ESAME STABILITE DALLA COMMISSIONE ESAMINATRICE DEL CONCORSO DI SEGUITO INDICATO NELLA RIUNIONE DEL 28 SETTEMBRE 2023

**Bando 367.403 CTER AREA NA3**

CONCORSO PUBBLICO PER TITOLI ED ESAMI PER L'ASSUNZIONE CON CONTRATTO DI LAVORO A TEMPO PIENO E INDETERMINATO DI 1 (UNA) UNITÀ DI PERSONALE PROFILO COLLABORATORE TECNICO ENTI DI RICERCA, VI LIVELLO PROFESSIONALE PRESSO L'AREA DELLA RICERCA DI NAPOLI 3 - POZZUOLI (NA) DEL CONSIGLIO NAZIONALE DELLE RICERCHE

**PROVA ORALE**  
**Giorno 28 settembre 2023**  
**BUSTA N. 1**

- 1) Il/La candidato/a illustri competenze ed esperienza professionale maturate in relazione alla tematica del Bando, oltreché eventuali rapporti tecnico/gestionali e/o pubblicazioni o brevetti indicati nel proprio curriculum.
- 2) Le cause di esclusione dalla gara d'appalto degli Operatori Economici: la Candidata / il Candidato illustri i requisiti di partecipazione di ordine generale, anche alla luce del nuovo codice dei contratti pubblici (D.lgs. 23/2023), e le principali modalità di verifica degli stessi.
- 3) Il/La candidato/a illustri le tipologie di memoria (memoria RAM, memoria ROM, memoria di massa).
- 4) Il/La candidato/a legga e traduca il seguente testo:

Cnr-Igm and Ifom scientist Dana Branzei wins a Fis grant by Italian Ministry of University and research

News 03/08/2023

Research Director of the "Luigi Luca Cavalli-Sforza" Institute of Molecular Genetics (Cnr-Igm) in Pavia and of IFOM "DNA Repair" Research Program, Dr. Dana Branzei, has been awarded a prestigious Advanced Grant from the Italian Science Fund of the



Ministry of University and Research (FIS 2021). Her project, titled "Replication-associated Cohesion and Recombination," is a beacon of scientific innovation in the ERC Life Sciences sector.

Born in Romania, educated in Japan, and currently based in Italy, Dr. Branzei has proven her outstanding competence and dedication to her research field. Her international journey reflects her global recognition, with her work earning her prestigious awards, such as other two previous ERC grants and memberships, including being an EMBO member.

Dr. Branzei's research primarily focuses on understanding the origins of chromosomal instability in eukaryotic cells following replicative stress and how genome replication is connected to the spatial organization and compaction of DNA in the cell nucleus. This project, funded by the FIS, intends to shed light on the complex pathways of cohesion and recombination, especially on their role in cancer progression.

(tratto dal portale web CNR <https://www.cnr.it/en> )

**PROVA ORALE**  
**Giorno 28 settembre 2023**  
**BUSTA N. 2**

- 1) Il/La candidato/a illustri competenze ed esperienza professionale maturate in relazione alla tematica del Bando, oltreché eventuali rapporti tecnico/gestionali e/o pubblicazioni o brevetti indicati nel proprio curriculum.
- 2) Le cause di esclusione dalla gara d'appalto degli Operatori Economici: la Candidata / il Candidato illustri i requisiti di partecipazione di ordine speciale, anche alla luce del nuovo codice dei contratti pubblici (D.lgs. 23/2023), e le principali modalità di verifica degli stessi.
- 3) Definizione e funzioni delle tabelle pivot in Excel o in analogo applicativo di office automation.
- 4) Il/La candidato/a legga e traduca il seguente testo:

Ecological research and technological advancement in the Arctic: the PRA "EcoClimate" project

The hydrographic unmanned surface vessel (Credits: E. Calizza) The hydrographic unmanned surface vessel (Credits: E. Calizza)

As part of the PRA "EcoClimate" project, coordinated by the trophic ecology Group of the Department of Environmental Biology at Sapienza University of Rome, in collaboration with the National Research Council of Italy - Institute for water research (Cnr-Irsa) based in Rome and Istitute for polar research (Cnr-Isp) based in Messina and Rome - a hydrographic unmanned surface vessel specifically configured for work at extreme latitudes has been used for the first time.

The use of this state-of-the-art technology allows for highly accurate 2D and 3D bathymetry of the lake basins in the Svalbard islands. The acquired data will enable the calculation of water volumes and turnover rates of the Arctic lakes with unprecedented precision, enabling predictions of their evolution based on expected environmental conditions in the region in the near future.

(tratto dal portale web CNR <https://www.cnr.it/en> )

**PROVA ORALE**  
**Giorno 28 settembre 2023**  
**BUSTA N. 3**

- 1) Il/La candidato/a illustri competenze ed esperienza professionale maturate in relazione alla tematica del Bando, oltreché eventuali rapporti tecnico/gestionali e/o pubblicazioni o brevetti indicati nel proprio curriculum.
- 2) Il Mercato Elettronico della P.A.: la Candidata / il Candidato illustri aspetti teorici e possibili strumenti operativi.
- 3) Il/La candidato/a illustri la definizione ed utilizzo di un programma client mail.
- 4) Il/La candidato/a legga e traduca il seguente testo:

Capturing with Silicon Nanowires the electrical signals generated by Neuroendocrine Pituitary Cell Networks

07/09/2023

Population of corticotrope cells on silicon nanowires and recorded electrical signals Located at the base of the brain and no larger than a pea, in mammals the pituitary gland (or hypophysis) is the most important endocrine gland of ectodermal origin. It directly links to hypothalamus, forming the most significant area of interconnection between the nervous system and the endocrine system. Here impulses and hormonal cues originate and control the entire endocrine processes. Within the anterior lobe of the pituitary, five distinct types of secretory cells are intricately organized, forming large-scale networks that communicate through various means. These networks play a crucial role in regulating essential human functions like growth, reproduction, and responses to emotional and physical stress. However, deciphering the intricate electrical communication occurring among these cells has proven to be a formidable challenge, primarily due to the lack of ultra-sensitive sensors capable of detecting the weak electrical signals involved in long-range interactions within and between these networks.

(tratto dal portale web CNR <https://www.cnr.it/en> )



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**PROVA ORALE**  
**Giorno 28 settembre 2023**  
**BUSTA N. 4**

- 1) Il/La candidato/a illustri competenze ed esperienza professionale maturate in relazione alla tematica del Bando, oltreché eventuali rapporti tecnico/gestionali e/o pubblicazioni o brevetti indicati nel proprio curriculum.
- 2) La Candidata / Il Candidato illustri la procedura di affidamento diretto alla luce del nuovo codice dei contratti pubblici D. Lgs. n. 36/2023 evidenziandone presupposti teorici e possibili schemi operativi.
- 3) Il/La candidato/a descriva le funzionalità del Programma Excel o di un analogo applicativo di office automation.
- 4) Il/La candidato/a legga e traduca il seguente testo:

2nd International One Health Conference

Event 19-20/10/2023

The National Research Council of Italy (Cnr) is amongst the Supporting Partners of the International One-Health Conference, the scientific event which will gather together the most prominent experts from institutions, academia, international organizations in health and environmental sectors to bring One-Health topics at the center of the scientific discussion. A Call for Abstracts is open to collect contribution proposals from researchers, field experts and practitioners who would like to get engaged in the Conference debate and present their work: deadline is August 30th, 2023.

(tratto dal portale web CNR <https://www.cnr.it/en> )

**PROVA ORALE**  
**Giorno 28 settembre 2023**  
**BUSTA N. 5**

- 1) Il/La candidato/a illustri competenze ed esperienza professionale maturate in relazione alla tematica del Bando, oltreché eventuali rapporti tecnico/gestionali e/o pubblicazioni o brevetti indicati nel proprio curriculum.
- 2) La Candidata / Il Candidato illustri funzioni e compiti del Direttore dell'Esecuzione del Contratto (DEC).
- 3) Il/La candidato/a descriva le funzionalità del Programma PowerPoint o di un analogo applicativo di office automation.
- 4) Il/La candidato/a legga e traduca il seguente testo:

The National Research Council of Italy (CNR) has always paid special attention to



international activity which has been for years one of its main features representing a fundamental aspect of the transformation that CNR is pursuing in order to properly face Third Millennium's challenges on research and technological development.

As of its birth in 1923, CNR was called to represent Italy within the International Research Council (IRC) and it was asked, the same year, to participate in IRC first meeting held in Brussels.

Despite the various restructurings and transformations, CNR's identity as a national multidisciplinary research institution remained unchanged throughout the past 80 years. The Council has always represented a significant presence and an important benchmark for the whole national and international scientific community, a source of wide range and qualified expertise, essential for the growth of the national scientific system's competitiveness and for the creation of a review system able to assess the Italian Research performance according to the international evaluation criteria. In designing its most recent restructuring, CNR's Central Administration decided to set up two Divisions, both in charge of working on international issues:

Unit for European Relations

Unit for International Relations

(tratto dal portale web CNR <https://www.cnr.it/en> )

**PROVA ORALE**  
**Giorno 28 settembre 2023**  
**BUSTA N. 6**

- 1) Il/La candidato/a illustri competenze ed esperienza professionale maturate in relazione alla tematica del Bando, oltreché eventuali rapporti tecnico/gestionali e/o pubblicazioni o brevetti indicati nel proprio curriculum.
- 2) La Candidata / Il Candidato illustri i presupposti e le fasi di svolgimento di una procedura di gara aperta per l'affidamento di contratti pubblici.
- 3) Il/La candidato/a descriva le funzionalità del Programma Word o di un analogo applicativo di office automation.
- 4) Il/La candidato/a legga e traduca il seguente testo:

Turning a health risk into an opportunity. A revolutionary approach to infections  
07/08/2023

The battle against infections and microbial resistance presents an ever-pressing challenge in the field of healthcare. Implant-associated infections, for example, increase the risk of device rejection, compromising patient health and contributing to the growing

problem of antimicrobial resistance. Standard treatments, including prolonged antibiotic regimens, often prove futile against these resilient bacterial communities, exacerbating the issue.

In this scenario, Bioaction takes a bold and innovative stance, departing from traditional approaches: rather than combating pathogenic bacteria head-on, Bioaction leverages them as valuable allies in promoting tissue regeneration for better implant integration. This novel perspective offers a paradigm shift in addressing infections.

The Bioaction project, backed by a generous EUR 3.4 million in funding, has garnered vital support from the European Innovation Council's Pathfinder Open program, known for its commitment to fostering groundbreaking innovations that push the boundaries of scientific exploration and technological advancement.

(tratto dal portale web CNR <https://www.cnr.it/en> )

**PROVA ORALE**  
**Giorno 28 settembre 2023**  
**BUSTA N. 7**

- 1) Il/La candidato/a illustri competenze ed esperienza professionale maturate in relazione alla tematica del Bando, oltreché eventuali rapporti tecnico/gestionali e/o pubblicazioni o brevetti indicati nel proprio curriculum.
- 2) La Candidata / Il Candidato illustri i presupposti e le fasi di svolgimento di una procedura di gara negoziata per l'affidamento di contratti pubblici.
- 3) Il/La candidato/a descriva definizione ed utilizzo di un programma browser web.
- 4) Il/La candidato/a legga e traduca il seguente testo:

STANCE4HEALTH - Smart Technologies for personAlised Nutrition and Consumer Engagement is a project funded by European Union's Horizon 2020 research and innovation programme under grant agreement No. 816303.

The overall objective of Stance4Health is to develop a complete Smart Personalized Nutrition (SPN) service based on the use of mobile technologies as well as tailored food production that will optimize the gut microbiota activity and long-term consumer engagement.

Stance4Health addresses topic DT-SFS-14-2018: Personalised Nutrition, belonging to the Work Programme 2018-2020 of “Food security, sustainable agriculture and forestry, marine, maritime and inland water research and the bioeconomy”. The specific challenge of this topic is to tackle some of society’s grand challenges like the development of new, secure and healthier foods while fighting against 21st century NCDs. The Commission Recommendation “A healthy diet for a healthy life”



(2010/250/EU) states that if common lifestyle risk factors, including diet-related ones, were eliminated, around 80% of cases of heart disease, strokes and type 2 diabetes, and 40% of cancers, could be avoided. Personalised nutrition for the European population is seen as the way forward to tackle this challenge.

(tratto dal portale web CNR <https://www.cnr.it/en> )