



Proposta	n. PDET-2026-369 del 06/05/2026
Determinazione dirigenziale	n. DET-2026-336 del 06/05/2026
Oggetto	Struttura Idro-Meteo-Clima. Accoglienza del dott. Nagaraju Gaddam iscritto al Corso di dottorato in "Future Earth: Climate Change and Societal Challenges" 40° Ciclo dell'Università degli Studi di Bologna.
Dirigente adottante	Struttura Idro-Meteo-Clima - Alberoni Pier Paolo
Dirigente proponente	STRUTTURA IDRO-METEO-CLIMA - Marsigli Chiara
Responsabile del procedimento	Gastaldo Thomas

Questo giorno *06/05/2026* il Responsabile di STRUTTURA IDRO-METEO-CLIMA, Alberoni Pier Paolo, ai sensi del Regolamento Arpae per l'adozione degli atti di gestione delle risorse dell'Agenzia, approvato con D.D.G. n. 19 del 26/02/2026 e dell'art. 4, comma 2 del D.Lgs. 30 marzo 2001, n. 165 determina quanto segue.

PREMESSO:

- che con D.D.G. n. 39/2025 è stata approvato il Protocollo d'intesa con l'Università Alma Mater Studiorum di Bologna e Arpae Emilia-Romagna per la collaborazione su tematiche ambientali di comune interesse;
- che il suddetto Protocollo d'intesa prevede, tra l'altro, l'accoglimento da parte di Arpae, presso le proprie strutture, di studenti per attività formative;

RICHIAMATI:

- la D.D.G. n. 37/2021 recante "Modifiche alla "Disciplina delle frequenze temporanee presso le strutture di Arpae Emilia-Romagna";
- il Regolamento per l'adozione degli atti di gestione delle risorse dell'Agenzia approvato con D.D.G. n. 19 del 26/02/2026 , ai sensi del quale l'adozione degli atti connessi all'assegnazione di borse di studio ed allo svolgimento di stage o tirocini formativi è attribuita, secondo le rispettive competenze, ai Responsabili di struttura;

PREMESSO INOLTRE:

- che con lettera del 09/04/2026 (PROT 09/04/2026.0065008.E) la Prof.ssa Silvana Di Sabatino, coordinatrice del Dottorato "Future Earth: Climate Change and Societal Challenges" dell'Università di Bologna, ha invitato Arpae-SIMC a partecipare al progetto MSCA-COFUND "FutureData4EU" come Associated Partner di Unibo, chiedendo ad Arpae-SIMC di ospitare per un periodo di sei mesi il dottorando Nagaraju Gaddam, in considerazione della collaborazione esistente tra Unibo ed Arpae su attività di ricerca incentrate sullo sviluppo di modellistica meteorologica ad alta risoluzione spaziale;
- che Arpae-SIMC ha fatto richiesta di adesione al progetto MSCA-COFUND "FutureData4EU" come Associated Partner di Unibo (lettera PROT 10/04/2026.0065934.U) ;
- che il progetto di ricerca del dottorando è incentrato sulla modellistica meteorologica ad alta risoluzione (titolo: Numerical Downscaling at the Local Microscale for the Evaluation of Climate Change Adaptation and Mitigation Measures) e che il lavoro durante il periodo indicato sarà focalizzato sull'analisi di simulazioni numeriche effettuate con il modello ICON, con l'obiettivo di quantificare l'impatto del modulo di parametrizzazione urbana su eventi di ondate di calore;
- che, così come concordato con l'Università di Bologna, il periodo presso Arpae-SIMC del dottorando avrà le seguenti caratteristiche:
 - Ente ospitante e sede del dottorato: Arpae-SIMC - Bologna

- Periodo: sei mesi non consecutivi divisi in due periodi: 10/05/2026-31/08/2026 e 10/03/2027-20/05/2027;
- Tutor universitario: Prof.ssa Silvana Di Sabatino;
- Tutor Arpae: Dr. Thomas Gastaldo;

PRESO ATTO:

- della disponibilità dell'Unità Modellistica numerica previsionale meteorologica ad accogliere il dottorando dott. Nagaraju Gaddam;
- che l'Università di Bologna ha assicurato il dott. Nagaraju Gaddam ai sensi della normativa vigente, sia per gli infortuni, sia per la responsabilità civile verso terzi;

RITENUTO:

- di accogliere la richiesta della Prof.ssa Di Sabatino dell'Università di Bologna e di approvare lo svolgimento di un periodo presso Arpae-SIMC all'interno dell'attività di dottorato di ricerca del dott. Nagaraju Gaddam, presso l'Unità Modellistica numerica previsionale meteorologica della Struttura Idro-Meteo-Clima, sede di Bologna, per sei mesi all'interno del periodo 10/05/2026-31/08/2026 e 10/03/2027-20/05/2027;

SU PROPOSTA:

- della dott.ssa Chiara Marsigli, Responsabile Servizio Sistemi di Monitoraggio e Previsione dell'Atmosfera, la quale, ai sensi del Regolamento per l'adozione degli atti di gestione delle risorse dell'Agenzia approvato con D.D.G. n. 19/2026, ha espresso parere favorevole in merito alla regolarità amministrativa e tecnica del presente atto;

DATO ATTO:

- che si è provveduto a nominare Responsabile del procedimento ai sensi della L. 241/90, il dott. Thomas Gastaldo;

DETERMINA

1. di approvare lo svolgimento di un periodo di ricerca di sei mesi presso Arpae-SIMC da parte del dottorando dott. Nagaraju Gaddam, iscritto al Corso di dottorato di Ricerca in "Future Earth: Climate Change and Societal Challenges", 40° ciclo, presso l'Università degli Studi di Bologna, secondo le modalità di seguito riportate:
 - Ente ospitante: Arpae-SIMC - Bologna
 - Periodo: sei mesi non consecutivi divisi in due periodi: 10/05/2026-31/08/2026 e 10/03/2027-20/05/2027;

- Tutor universitario: Prof.ssa Silvana Di Sabatino;
 - Tutor Arpae: Dr. Thomas Gastaldo;
 - Titolo del Dottorato: “Numerical Downscaling at the Local Microscale for the Evaluation of Climate Change Adaptation and Mitigation Measures”;
2. di sottoscrivere a questo fine il Secondment Agreement tra Unibo ed Arpae-SIMC, allegato al presente atto per formarne parte integrante e sostanziale, nel quale vengono definite le modalità con cui il dottorando viene ospitato presso l’ente ospitante (Arpae-SIMC) nell’ambito del progetto MSCA-COFUND “FutureData4EU” e all’interno del quale Unibo si impegna espressamente a compiere le azioni necessarie per l’amendment del Grant Agreement del Progetto, includendo il secondment agreement tra Arpae-SIMC ed Unibo nell’occasione del primo amendment possibile;
 3. di dare atto che il rapporto in oggetto, oltre a non configurarsi in alcun modo come rapporto di lavoro, non comporta alcun vincolo ed onere retributivo per Arpae.

IL DIRIGENTE ADOTTANTE

Firmato digitalmente

Alberoni Pier Paolo

Si dichiara che sono parte integrante del presente provvedimento gli allegati riportati a seguire ¹, come file separati dal testo del provvedimento sopra riportato:

¹ L'impronta degli allegati rappresentata nel timbro digitale QRCode in elenco è quella dei file pre-esistenti alla firma digitale con cui è stato adottato il provvedimento



ALMA MATER STUDIORUM
UNIVERSITÀ DI BOLOGNA

DEPARTMENT
OF PHYSICS AND ASTRONOMY
"AUGUSTO RIGHI"

Secondment Agreement

This Agreement is made between:

ALMA MATER STUDIORUM – UNIVERSITA DI BOLOGNA – Department of Physics and Astronomy "Augusto Righi" indicated as "UNIBO", or Seconding Entity established in Via Zamboni 33, Bologna, 40126 - here represented by the Head of the of Department of Physics and Astronomy "Augusto Righi", Professor Andrea Cimatti
And

Agenzia Regionale per la Prevenzione, l'Ambiente e l'Energia dell'Emilia-Romagna (Arpae) Struttura Idro Meteo Clima (SIMC) after indicated as Arpae-SIMC or Host Entity established in Viale Silvani 6, 40122 Bologna - here represented by Pier Paolo Alberoni, Responsible of the Hydro Meteo Climate Structure of Arpae

Definitions:

"Background"

Background means any data, know-how or information — whatever its form or nature (tangible or intangible), including any rights such as intellectual property rights — that is:

- (a) held by the beneficiaries before they acceded to the Agreement and
- (b) needed to implement the action or exploit the Results.

"Career Development Plan" (PCDP)

The Career Development Plan is a document describing how the researcher career should be established. A Career Development Plan must be established jointly by the supervisor and the Doctoral Candidate. In case of joint supervision, such a plan should be established involving all supervisors. In addition to research objectives, this Plan comprises the Doctoral Candidate's training and career needs, including training on transferable skills, teaching, planning for publications and participation in conferences and events aiming at opening science and research to citizens.

"Needed"

Needed means:

For the implementation of the Project:

Access Rights are needed if, without the grant of Access Rights, carrying out the tasks assigned to the recipient Party would be technically or legally impossible, significantly delayed, or require significant additional financial or human resources.

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For exploitation of own Results:

Access Rights are Needed if, without the grant of Access Rights, the Exploitation of own Results would be technically or legally impossible.

“Researcher” – Doctoral Candidate (DC)

The Researcher- Doctoral Candidate is the person whom Secondment is regulated by this Agreement. The Researcher must not be already in possession of a doctoral degree at the date of the Secondment and must be enrolled in a doctoral programme leading to the award of a doctoral degree in at least one EU Member State or Horizon Europe Associated Country, and for Joint Doctorates in at least two. The Researcher is recruited and employed under a separate employment agreement by the Seconding Entity.

“Results”

Results means any (tangible or intangible) output of the action such as data, knowledge or information – whatever its form or nature, whether it can be protected or not – that is generated in the action, as well as any rights attached to it, including intellectual property rights.

“Secondment”

Secondment means a period during which the Doctoral Candidate (DC) is hosted by the Host Entity.

“Secondment Plan” means the plan of activities to be carried by the Researcher in the Host Entity during his/her Secondment.

General provisions:

The Seconding Entity agrees to the placement of Nagaraju Gaddam with UNIBO as a seconded Doctoral Candidate within the framework of the FutureData4EU Marie Skłodowska-Curie Action: COFUND Grant Agreement n.101126733 – FutureData4EU for 100% full time equivalent on the following conditions:

First period:

- | | |
|--|----------------|
| <u>1.Start date of the Secondment:</u> | 10 May 2026 |
| <u>2. End Date of the Secondment:</u> | 31 August 2026 |

Second period:

- | | |
|--|---------------|
| <u>1.Start date of the Secondment:</u> | 10 March 2027 |
| <u>2. End Date of the Secondment:</u> | 20 May 2027 |



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The Host Party accepts the secondment of the doctoral candidate notwithstanding the fact that, at the time of signing this Agreement, the Grant Agreement (GA) does not yet provide for such secondment. UNIBO expressly undertakes to amend the GA by including the present secondment at the time of the first possible amendment, and the Host Party nevertheless undertakes to comply with all the rules and eligibility conditions set out in the MSCA COFUND Grant Agreement, in particular the following annexed articles of the GA (Annex 1):

- Proper implementation of the action (Article 11)
- Conflicts of interest (Article 12)
- Confidentiality and security (Article 13)
- Ethics and values (Article 14)
- Visibility (Article 17.2)
- Specific rules for carrying out the action (Article 18)
- Information obligations (Article 19)
- Record-keeping (Article 20)

3. Activities

During the period of the Secondment the Doctoral Candidate will perform the tasks as outlined in the attached Secondment Plan. This role is based at the Host Entity in Bologna, Italy and the Doctoral Candidate will reside in that country.

The Host Entity will provide the facilities necessary for the Doctoral Candidate to perform the tasks as outlined in the attached Secondment Plan for the duration of this Agreement.

4. Financial arrangements

The Host Entity will not require the payment of any fees by the Doctoral Candidate.

The Host Entity shall cover the costs associated with the general use of premises, infrastructure, equipment, products and consumables during the period of the Secondment.

In no event shall the Host Entity be responsible for the payment or waiver of any cost associated with the accommodation, board or travel expenses of the Doctoral Candidate.

The doctoral candidate will not receive any other incomes than those received from the UNIBO for the activities carried out in the framework of this Agreement.

5. Terms and Conditions

The Doctoral Candidate shall always remain subject to the terms and conditions under his/her contract with the Seconding Entity. The Doctoral Candidate will be maintained on the payroll of the Seconding Entity and the Seconding Entity shall retain all rights and responsibilities in relation to its appointment as doctoral candidate. Any current pension arrangements of the Doctoral Candidate will remain unchanged.

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This Agreement shall be governed by Italian Law.

The Seconding Entity and the Host Entity will endeavour to amicably settle disputes arising out of or in connection with this Agreement.

If, and to the extent that, any such dispute, controversy or claim has not been settled amicably within 90 days, the courts of Bologna shall have exclusive jurisdiction

The Secondment is subject to the Doctoral Candidate being and remaining eligible to be appointed in the seconding country and is subject to the Doctoral Candidate obtaining a valid visa entitling his/her to work in the Host Entity country and compliance with the Host Entity country's immigration rules.

While the Host Entity is supporting this Secondment, the Doctoral Candidate shall be under the day-to-day control of the Host Entity and shall undertake to comply with the working practices of and take instructions from the Host Entity and official signs and notices of the Host Entity.

The Doctoral Candidate must devote him/herself to the tasks as outlined in the attached Secondment Plan, unless there are duly justified reasons connected to personal or family circumstances.

At the end of the Secondment, the Host Entity will provide the Doctoral Candidate and the Seconding Entity with a declaration confirming the duration of the Secondment and the full-time commitment of the Doctoral Candidate during such period.

The Doctoral Candidates will benefit from the mandatory public holidays provided by the host entity's calendars.

The Host Entity will ensure that the Doctoral Candidate enjoys the same standards of safety and insurance coverage as those of its employees holding a similar position, and will provide health, safety and accident insurance coverage or equivalent for the doctoral candidate as required by law.

The Host Entity shall indemnify the Seconding Entity against all costs, claims, liabilities and expenses of any nature (including, without limitation, all compensation for dismissal under statute or common law and all costs and expenses incurred by the Seconding Entity in settling, contesting or dealing for the same) resulting from any breach by the Host Entity of its obligations under this Agreement.

The Seconding Entity shall not be liable in respect of any loss or damage suffered by any party arising out of or relating to Host Entity's failure to fully meet its responsibilities under the

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relevant national health and safety laws, regulations or practice. So far as is reasonably practicable, the Host Entity will ensure that premises, plant, equipment and working environments are safe and without risk to the health and safety of the Doctoral Candidate and other persons who may also be affected. The Seconding Entity shall furthermore not be liable for any loss or damage suffered by any party arising out of or relating to the Doctoral Candidate failure to fully meet his/her responsibilities under the relevant national laws and/or regulations applying to the Seconding Entity.

6. Intellectual Property

6.1. Ownership of Results

The Parties agree that any Result, shall be owned by the Seconding Entity.

6.2 Access Rights

The Host Entity acknowledges and agrees that the Doctoral Candidate will have royalty-free Access rights to data, know-how or information whatever its form or nature, tangible or intangible, including any rights such as intellectual property rights, which is held by the Host Entity prior to its accession to this Secondment Agreement ("Host Entity Background").

The Parties agree that the Host Entity will be granted Access rights to the Results royalty-free for non-commercial purposes, including research or educational activities.

6.3 Publications

The Parties shall include in any publication or any other communication relating to the Results the following statement to indicate that said Result was generated with the financial support from the European Union:

"The research leading to these Results has received funding from the European Union's Horizon Europe research and innovation programme under the Marie Skłodowska-Curie Grant Agreement 101126733".

Before engaging in a communication activity expected to have a mainstream media coverage the Host Entity shall inform the Beneficiary.

Prior notice of any planned publication regarding activities covered by the present Secondment Agreement within the Secondment shall be given by the Party who intends to publish to the other Party, thirty (30) days before the intended publication.

Any objection to the planned publication shall be made in writing by the other Party within fifteen (15) days after receipt of the notice.

If no objection is made within the time limit stated above, the publication is permitted.

An objection is justified if the confidentiality of the information of the Party is compromised by the publication.

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The objection has to include a precise request for necessary modifications. The objecting Party shall not unreasonably continue the opposition if appropriate actions are taken following the request for modification.

6.4 Use of names, logos and trademarks logo

Nothing in this Secondment Agreement shall be construed as conferring rights to use in advertising, publicity or otherwise the name of the Parties or any of their logos or trademarks without their prior written approval.

7. Additional Remarks

Nothing in this Agreement shall be construed in any way as to diminish or alter the rights of the European Commission as set out in the FutureData4EU Grant Agreement.

Nothing in this Agreement shall be construed in any way as to alter any other agreements or the associated terms and conditions of the appointment held by the Doctoral Candidate at the Seconding Entity.

The period of this Agreement remains subject to review at any time by either the Seconding Entity or the Host Entity (see 'Termination' below) but cannot be reviewed later than one month before the end of the secondment period.

Any proposed changes to the terms of this Agreement shall be discussed and can be only agreed by the Parties in writing.

8. Termination

This Agreement shall be terminated if the Doctoral Candidate's appointment by the Seconding Entity is terminated for whatever reason.

Either the Seconding Entity or the Host Entity may terminate this Agreement before the end of the period with one month's notice in writing to the other party.

9. Signatures

This Secondment Agreement is executed solely in electronic form and shall be electronically signed by each Party. The Parties expressly agree to sign this Agreement *via* an electronic signature, using DocuSign® with ID verification or OTP mobile verification, and agree that this shall constitute a valid and enforceable agreement between them. Each Party will receive an electronic file (on PDF format) of this Agreement, digitally signed and including all signature certificates.

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Signed.....

Date:

NAME Pier Paolo Alberoni

JOB TITLE Responsible of the Hydro Meteo Climate Structure of Arpae

For and on behalf of the Arpae-SIMC Emilia- Romagna, Viale Silvani 6, 40122 Bologna

Signed.....

Date:

NAME: Professor Andrea Cimatti

JOB TITLE: Head of the Department of Physics and Astronomy "Augusto Righi"

For and on behalf of the ALMA MATER STUDIORUM – Università di Bologna, Via Zamboni 33,
Bologna 40126

Read and agreed:

Signed.....

Date:

NAME Nagaraju Gaddam

Doctoral Candidate

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Attachment 1

Secondment Plan

During the secondment period, the Doctoral Candidate will focus on the analysis of numerical simulations performed with the ICON model, with the objective of assessing the impact of the urban parameterization module during a heatwave event.

The activity will involve the evaluation of model outputs generated under different configurations. In particular, the simulations will be conducted using the operational setup of the ICON-2I model at 2.2 km horizontal resolution, as well as a higher-resolution configuration at 500 m. This dual approach will allow for a detailed comparison of the representation of urban processes across scales.

The Doctoral Candidate will analyze key atmospheric variables to quantify the influence of the urban module during an heatwave event. Special attention will be given to urban–rural contrasts and to the capability of the model to capture localized thermal effects at higher resolution. The model forecasts will be compared with observations, with a particular focus on the Emilia-Romagna region and the city of Bologna. The results obtained will be compared with previous simulations performed with the WRF model.

The expected outcomes of the secondment include:

- (i) a comprehensive assessment of the added value of high-resolution simulations in representing urban heatwave dynamics;
- (ii) a comparison of the performance of the urban module in ICON and in WRF on simulating a heatwave.

The results of this work will contribute to ongoing research activities on urban modeling and may support the development of more accurate forecasting tools for extreme heat events.



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Attachment 2

MSCA-COFUND "FutureData4EU" [GA n. 101126733] - Declaration of exclusive work

To whom it may concern,

This is to certify that [Full Name of the Fellow], has carried out the secondment at [Name of the Host Institution] from [Start Date] to [End Date].

During this period, the Fellow has worked exclusively on the research project titled [Project Title] of the MSCA-COFUND "FutureData4EU" [GA n. 101126733], under the supervision of [Name of Supervisor of the Host Institution].

We hereby confirm that the Fellow's activities, time, and resources have been fully dedicated to the implementation of this project.

[Date], at [City, Country]

[Name and Title of the Authorized Representative]

[Host Institution Name]

[Signature]



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