

# UNIVERSIDAD POLITÉCNICA DE MADRID

## OFERTA DE TRABAJO/JOB OFFER

### INFORMACION BÁSICA/BASIC INFO

- \***PROYECTO/PROJECT:** Computer modeling of bio-mechanics and hormone transport in plant development
- \***100% FINANCIACION UE/PLAN DE TRANSFORMACIÓN, RECUPERACION Y RESILIENCIA/100% EU FINANCING/TRANSFORMATION PLAN, RECOVERY AND RESILIENCE:** NO
- \***PUESTO OFERTADO/TITLE OF THE POSITION:** Postdoctoral researcher
- \***Nº VACANTES/NUMBER OF POSITIONS AVAILABLE:** 1
- \***CATEGORÍA/RESEARCHER PROFILES:** Recognised Researcher (R2)
- \***DEPARTAMENTO/DEPARTMENT:** CBGP UPM-INIA(CSIC)
- \***DIRECCIÓN/WORK LOCATIONS:**  
Centro de Biotecnología y Genómica de Plantas UPM – INIA Parque Científico y Tecnológico de la U.P.M. Campus de Montegancedo, 28223, Madrid, Spain

### INFORMACION DE CONTRATACIÓN/HIRING INFO

- \***ÁREA TECNOLÓGICA/WORK TECHNOLOGY AREA:** A- Biociencias
- \***CAMPO DE INVESTIGACION/RESEARCH FIELD:** Biological sciences - Botany
- \***FUNCIONES/OFFER DESCRIPTION:**  
Postdoctoral position in computer modeling of organ growth at @PlantDynamics laboratory CBGP UPM-INIA  
Plants provide a fascinating example how to build to rebuild. Because they cannot run or escape, plants evolved the regenerative, de novo organogenesis potential which is manifested through self-organization of cells and tissues. Coordinated patterning of plants requires responses to numerous growth substances, so called phytohormones. Among those small signaling molecules auxins play a remarkable role in coordinating plant architecture such as meristem size, flower and leaf positioning, root growth and plant response to environmental cues. Our lab seeks answers to following questions:
- \***CONTRATO/TYPE OF CONTRACT:** Indefinido de Actividades Científico-Técnicas Art. 23.bis Ley de la Ciencia
- \***JORNADA/JOB STATUS:** Full-time
- \***HORAS SEMANA/HOURS PER WEEK:** 37.5
- DISPONIBILIDAD PARA VIAJAR/AVAILABILITY TO TRAVEL:** Sin especificar
- \***SALARIO BRUTO AÑO/SALARY OFFERED:** 29000
- \***FECHA LÍMITE INSCRIPCIÓN/APPLICATION DEADLINE:** 10 days from publication
- \***FECHA ESTIMADA DE CONTRATACIÓN/ESTIMATED DATE OF JOB CONTRACT:** 26.03.2023
- \***DURACIÓN DEL CONTRATO/TERM OF CONTRACT:**
- \***FINANCIACIÓN PROGRAMA MARCO UE/IS THE JOB FUNDED THROUGH A EU RESEARCH FRAMEWORK PROGRAMME?:** Not funded by an EU programme
- PROGRAMA REFUGIADOS UE/Science4Refugees:** No

### INSCRIPCIÓN/APPLICATION

- \***EMAIL DE INSCRIPCIÓN/APPLICATION EMAIL:** k.wabnik@upm.es
- \***PERSONA DE CONTACTO/CONTACT PERSON:** Dr. Krzysztof Wabnik
- WEBSITE:** [https://www.cbgp.upm.es/index.php/es/?option=com\\_content&view=article&id=176](https://www.cbgp.upm.es/index.php/es/?option=com_content&view=article&id=176)

## REQUISITOS/REQUIREMENTS

### \*NIVEL EDUCATIVO REQUERIDO/REQUIRED EDUCATION LEVEL

- **PRINCIPAL CAMPO DE INVESTIGACIÓN 1/MAIN RESEARCH FIELD 1:** Biological sciences
  - NIVEL/LEVEL: Doctor
- **PRINCIPAL CAMPO DE INVESTIGACIÓN 2/MAIN RESEARCH FIELD 2:** Computer science
  - NIVEL/LEVEL: Grado

### HABILIDADES-CUALIFICACIONES-INFORMÁTICA/SKILLS/QUALIFICATIONS:

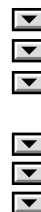
- 1) Advanced English written and spoken
- 2) Q1 publications as first author
- 3) Knowledge of C++, Python, R programming languages
- 4) Experience in modeling biological processes
- 5) Experience with computer modeling plant growth and development
- 6) Proven record of collaboration with experimentalists in the past

### REQUERIMIENTOS ESPECÍFICOS/SPECIFIC REQUIREMENTS:

- 1) Experience with OpenGL and cell segmentation algorithms (i.e. MorphoDynamX)
- 2) Good understanding of plant hormone biology
- 3) Experience with manuscript writing and preparation

### IDIOMAS REQUERIDOS/REQUIRED LANGUAGES:

- **IDIOMA 1/LANGUAGE 1:** English
  - NIVEL LECTURA/READING LEVEL: Alto
  - NIVEL ESCRITO/WRITING LEVEL: Alto
  - NIVEL CONVERSACIÓN/CONVERSATION LEVEL: Alto
- **IDIOMA 2/LANGUAGE 2:**
  - NIVEL LECTURA/READING LEVEL:
  - NIVEL ESCRITO/WRITING LEVEL:
  - NIVEL CONVERSACIÓN/CONVERSATION LEVEL:
- **IDIOMA 3/LANGUAGE 3:**
  - NIVEL LECTURA/READING LEVEL:
  - NIVEL ESCRITO/WRITING LEVEL:
  - NIVEL CONVERSACIÓN/CONVERSATION LEVEL:



### EXPERIENCIA EN INVESTIGACION REQUERIDA/REQUIRED RESEARCH EXPERIENCE:

- **CAMPO INVESTIGACIÓN 1/RESEARCH FIELD 1:** Biological sciences - Biology
  - AÑOS MÍNIMOS DE EXPERIENCIA REQUERIDOS/MINIMUM YEARS OF EXPERIENCE REQUIRED: 1 - 4
- **CAMPO INVESTIGACIÓN 2/RESEARCH FIELD 2:** Computer science - Modelling tools
  - AÑOS MÍNIMOS DE EXPERIENCIA REQUERIDOS/MINIMUM YEARS OF EXPERIENCE REQUIRED: 1 - 4
- **CAMPO INVESTIGACIÓN 3/RESEARCH FIELD 3:**
  - AÑOS MÍNIMOS DE EXPERIENCIA REQUERIDOS/MINIMUM YEARS OF EXPERIENCE REQUIRED:



\*Campos obligatorios/Required fields

## INFORMACIÓN ADICIONAL/ADDITIONAL INFO

### BENEFICIOS/BENEFITS:

Work in international and highly dynamic research environment. Interdisciplinary training and cutting-edge integration of computational and experimental methodologies. Work on forefront of growing plant modeling community. Access to close collaborations with world-leading scientists

### CRITERIOS Y PROCESO DE SELECCIÓN/ELIGIBILITY CRITERIA AND SELECTION PROCESS

(<https://www.upm.es/Investigacion/HRS4R/HRS4R/Seleccion>):

Se aplican las pautas establecidas en el proceso de selección del nuevo *Reglamento para el proceso de selección y contratación del personal investigador, personal técnico y personal gestor relacionado con la investigación de la Universidad Politécnica de Madrid*, aprobado en la UPM.

Curriculum vitae and personal interview. Degree of fulfillment of required and additional requirements

### COMENTARIOS ADICIONALES/ADDITIONAL COMMENTS: