

## **SEM Council Members**

### **Name:**

Alicia María Muro-Pastor



### **Council role:**

President of the Molecular Microbiology Group

### **Employer or Institute:**

Instituto de Bioquímica Vegetal y Fotosíntesis  
(Consejo Superior de Investigaciones Científicas  
and Universidad de Sevilla)

### **Title:**

Tenured Scientist OPI

### **Main areas of study/work:**

Regulation mediated by non-coding RNAs. Bacterial cellular differentiation. Metabolic adaptations in cyanobacteria.

### **Three main or most recent publications:**

Brenes-Álvarez M, Vioque A, Muro-Pastor AM. 2022. The heterocyst-specific small RNA NsiR1 regulates the commitment to differentiation in *Nostoc*. *Microbiology Spectrum* 10:e02274-21. <https://journals.asm.org/doi/10.1128/spectrum.02274-21>

Brenes-Álvarez M, Olmedo-Verd E, Vioque A, Muro-Pastor AM. 2021. A nitrogen stress-inducible small RNA regulates CO<sub>2</sub> fixation in *Nostoc*. *Plant Physiology* 187:787-798. <https://doi.org/10.1093/plphys/kiab309>.

Brenes-Álvarez M, Vioque A, Muro-Pastor AM. 2020. The integrity of the cell wall and its remodeling during heterocyst differentiation are regulated by phylogenetically conserved small RNA Yfr1 in *Nostoc* sp. strain PCC 7120. *mBio* 11: e02599-19. <https://doi.org/10.1128/mBio.02599-19>.

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### **Keywords:**

Heterocyst. Cyanobacteria. Non-coding RNAs. Antisense RNAs.