

## SEM Council Members

### Name:

Juan A. Ayala

### Council role:

Secretary

### Employer or Institute:

Centro de Biología Molecular Severo Ochoa (CBMSO),  
Autonomous University of Madrid (UAM) - Spanish National  
Research Council (CSIC), Spain

### Title:

Research Scientific

Head of the Bacterial Cell Division and Antibiotic Resistance  
Research Group at the CBMSO, Madrid.

### Main areas of study/work:

Bacterial cell division. PBPs. Peptidoglycan.  $\beta$ -lactamases.

### Other information of Interest:

Honorary Professor at the "Universidad Autónoma de Madrid" (UAM), Spain.

Professor Ad-Honorem of the "Universidad de la República" (UdelAR), Uruguay.

### Three main or most recent publications:

Loza-Correa M, Ayala JA, Perelman I, Hubbard K, Kalab M, Yi Q-L, Taha M, de Pedro MA, Ramirez-Arcos S. 2018. The peptidoglycan and biofilm matrix of *Staphylococcus epidermidis* undergo structural changes when exposed to human platelets. *PLoS ONE* 14(1): e0211132. doi.org/10.1371/journal.pone.0211132.

Castanheira S, Cestero JJ, Rico-Pérez G, García P, Cava F, Ayala JA, Pucciarelli MG, García-del Portillo F. 2017. A specialized peptidoglycan synthase promotes *Salmonella* cell division inside host cells. *mBio* 8(6):e01685-17. doi.org/10.1128/mBio.01685-17.

Torrens G, Pérez-Gallego M, Moya B, Munar-Bestard M, Zamorano L, Cabot G, Blázquez J, Ayala JA, Oliver A, Juan C. 2017. Targeting the permeability barrier and peptidoglycan recycling pathways to disarm *Pseudomonas aeruginosa* against the innate immune system. *PLoS ONE* 12(7):e0181932. doi.org/10.1371/journal.pone.0181932.

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### Keywords:

$\beta$ -lactam antibiotics.  $\beta$ -lactamases. Penicillin-binding proteins (PBPs). Antibiotics resistance mechanisms. Microbial cell division. Molecular Microbiology.

