



## REVISIÓN DE LA LITERATURA. MICROBIOLOGÍA

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**1.- Amplification-free detection of SARS-CoV-2 with CRISPR-Cas13a and mobile phone microscopy**

Fozouni P, Son S, Díaz de León Derby M, Knott GJ, Gray CN, D'Ambrosio MV, et al.

**Cell. 2021;184(2):323-333.e9.** doi: 10.1016/j.cell.2020.12.001.

**2.- SERS-based sensor for the detection of sexually transmitted pathogens in the male swab specimens: a new approach for clinical diagnosis.**

Berus SM, Adamczyk-Popławska M, Młynarczyk-Bonikowska B, Witkowska E, Szymborski T, Waluk J, et al.

**Biosens Bioelectron. 2021;189:113358.** doi: 10.1016/j.bios.2021.113358.

**3.- Smartphone multiplex microcapillary diagnostics using Cygnus: development and evaluation of rapid serotype-specific NS1 detection with dengue patient samples.**

Needs SH, Sirivisoot S, Jegouic S, Prommool T, Luangaram P, Srisawat C, et al.

**PLoS Negl Trop Dis 2022; 16(4): e0010266.** doi: 10.1371/journal.pntd.0010266.

**4.- Direct antimicrobial resistance prediction from clinical MALDI-TOF mass spectra using machine learning**

Weis C, Cuénod A, Rieck B, Dubuis O, Graf S, Lang C, et al.

**Nat Med. 2022;28(1):164-174.** doi: 10.1038/s41591-021-01619-9.

**5.- AI-based mobile application to fight antibiotic resistance**

Pascucci M, Royer G, Adamek J, Al Asmar M, Aristizabal D, et al.

**Nat Commun 2021; 12, 1173.** <https://doi.org/10.1038/s41467-021-21187-3>

**6.- NDM-1 introduction in Portugal through a ST11 KL105 *Klebsiella pneumoniae* widespread in Europe**

Novais A, Veiga Ferraz R, Viana M, Martins da Costa P, Peixe L.

**Antibiotics (Basel). 2022;11(1):92.** doi: 10.3390/antibiotics11010092.



- 7.-** Effect of Gram stain-guided initial antibiotic therapy on clinical response in patients with ventilator-associated pneumonia. The GRACE-VAP randomized clinical trial  
Yoshimura J, Yamakawa K, Ohta Y, Nakamura K, Hashimoto H, Kawada M, et al.  
**JAMA Network Open. 2022;5(4):e226136.** doi:10.1001/jamanetworkopen.2022.6136
- 8.-** Multicenter evaluation of the Acuitas AMR gene panel for detection of an extended panel of antimicrobial resistance genes among bacterial isolates.  
Simner PJ, Musser KA, Mitchell K, Wise MG, Lewis S, Yee R, et al.  
**J Clin Microbiol. 2022; 60(3):e02098-21.** doi: 10.1128/JCM.02098-21.
- 9.-** Novel chromogenic medium CHROMagar™ Candida Plus for detection of *Candida auris* and other *Candida* species from surveillance and environmental samples: a multicenter study  
Mulet Bayona JV, Salvador García C, Tormo Palop N, Valentín Martín A, González Padrón C, Colomina Rodríguez J, et al.  
**J. Fungi 2022, 8,281.** <https://doi.org/10.3390/jof8030281>
- 10.-** Detection of newly secreted antibodies predicts nonrecurrence in primary *Clostridioides difficile* infection.  
Haddad NS, Nozick S, Kim G, Ohanian S, Kraft CS, Rebolledo PA, et al.  
**J Clin Microbiol. 2022; 60(3):e02201-21.** doi: 10.1128/jcm.02201-21
- 11.-** Widespread cefiderocol heteroresistance in carbapenem-resistant Gram-negative pathogens  
Choby JE, Ozturk T, Satola SW, Jacob JT, Weiss DS.  
**Lancet Infect Dis. 2021;21(5):597–598.** doi:10.1016/S1473-3099(21)00194-8.
- 12.-** Emergence of high-level cefiderocol resistance in carbapenem-resistant *Klebsiella pneumoniae* from bloodstream infections in patients with hematologic malignancies in China.  
Lan P, Lu Y, Chen Z, Wu X, Hua X, Jiang Y, et al.  
**Microbiol Spectr. 2022;10(2):e0008422.** doi: 10.1128/spectrum.00084-22.
- 13.-** Evidence of artemisinin-resistant malaria in Africa  
Balikagala B, Fukuda N, Ikeda M, Katuro OT, Tachibana SI, Yamauchi M, et al.  
**N Engl J Med 2021;385:1163-71.** doi: 10.1056/NEJMoa2101746