November webinar Q&A

Dr. Carla Fontana Q&A

- On which protocols are you implementing PhenoMATRIX™?
  Currently, we are implementing PhenoMATRIX™ on urine and CRE, specifically rectal swabs for the culture of *Enterobacterales* resistant to carbapenem.

- Do you synchronize the same first reading of the plates for different specimens (urine, wound samples, blood samples), or do you pick different reading timepoints according to the specimen type (e.g., 12, 16, or even 20 hours)?
  We use different time points depending on the sample type: e.g., 16 hours for urine, the first reading for CRE at 16 hours, and the second reading at 36 h. BAL 16h, 24 and 36 H, CSF 6h, 16h, 24h, 36h, 48h and 60 h. BCs, first reading 4 h, second reading 8 h, then 16h, 24h, and finally 36h (but we usually stop at 8 h).

Dr. Simone Ambretti Q&A

- Do you think you'll add more protocols in PhenoMATRIX™? Do you think it will speed up the process further?
  Yes, we are working with Copan to develop other protocols for single plate culture (Staph aureus surveillance, GAS cultures, stool cultures) and multiple plate cultures (wound swabs, genital and respiratory low tract samples). I think the first ones could be ready soon, while we still need more time to develop protocols for more complex samples. I'm sure that adding more protocols will further speed up our diagnostic workflow.

- Do you think to implement the colony picker Colibrì?
  I hope so. This solution is the real Full lab Automation for bacteriology.

- Was it easy to implement PhenoMATRIX™ rules?
  It depends on the protocol: it was easy for some of them, like CRE, but it was more difficult for others, for example urine, since urine protocol has a high level of complexity.

- Did you perform any studies to show the time savings in the laboratory when starting to use PhenoMATRIX™?

  We are working on these data. We introduced PhenoMATRIX in 2020 during the pandemic: it was not easy to introduce the system and collect data during this period.

- How is the AST performed in your lab? Through disk diffusion or automated systems?

  We mainly use automated systems for broth microdilution, but I would like to introduce disk diffusion RAST for positive blood cultures in the next few months.

- Do you think that IVD regulations will pose a relevant problem to establish and validate PhenoMATRIX™ protocols?

  Yes, this could be a challenge even if I showed you that the validation process is meticulous and strict with Copan, and customized with our lab plates and incubation times. But I have another question: what is the validation process of the visual reading of operators? How can be sure that the quality of operators' reading is constantly good?

- Do you synchronize the same first reading of the plates for different specimens (urine, wound samples, blood samples), or do you pick different reading timepoints according to the specimen type (e.g., 12, 16, or even 20 hours)?

  Reading timepoints were defined according to specimen type (mostly 14h or 16h).