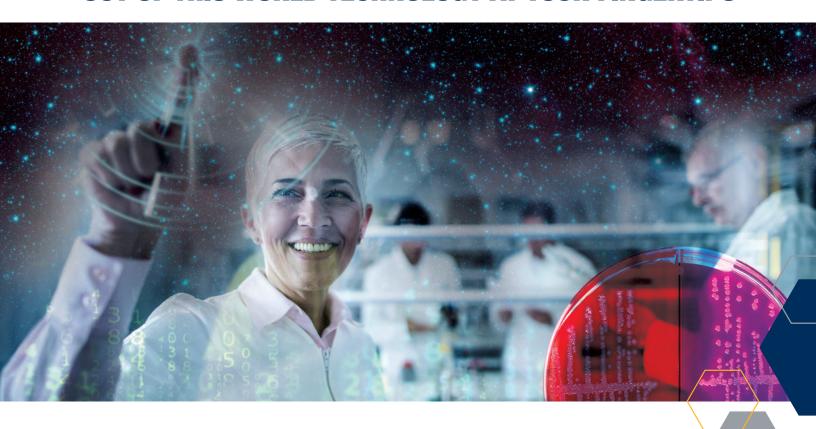
PhenoMATRIX™ Software Suite

OUT OF THIS WORLD TECHNOLOGY AT YOUR FINGERTIPS



PhenoMATRIXTM OFFERS WASPLABTM

USERS an exclusive selection of highly sophisticated algorithms completely unparalleled in the industry. The innovative software automatically recognizes organisms through advanced Artificial Intelligence (AI) allowing microbiology labs to read, interpret, and segregate bacterial cultures with the click of a button.

Automated reading, interpretation & segregation of BACTERIAL CULTURES proven with over 200,000 samples and counting!











NEVER TOUCH A NEGATIVE PLATE AGAIN!

The PhenoMATRIX[™] Suite of Algorithms Includes:

Chromogenic Detection of any Organism of Interest (MRSA, VRE, ESBL, GBS)

Enhanced Vision and Sensitivity.

By setting the algorithms to evaluate the value, hue and saturation of the color pigmentation present in chromogenic media, COPAN's software can accurately detect and differentiate organisms on any manufacturer's chromogenic agar. With this capability, PhenoMATRIXTM algorithms detect even the smallest single colonies, so you'll never miss a positive!

Urine Culture Segregation Based on Colony Counts with Growth, No Growth Discrimination

Quantify and Segregate.

Based on customizable user defined thresholds, Growth / No Growth algorithm counts colonies and triages urine cultures into No Growth, <10 cfu, >10 cfu or any particular user defined categories. This segregation speeds up the overall reading and processing time for urine cultures. No growth urine cultures can be quickly verified, resulted and plates sent automatically to trash. Cultures with <10 cfu comprising of contaminates or normal genitourinary flora can be quickly reported. Categorization of urine cultures allows the laboratory to speed through the daily workload so that true positive urines can be quickly worked up for AST, ID or further investigations started.

Automatic Colony Recognition on Standard Medium

Differentiate Normal Flora from Cultures that Need Workup.

Copan's colony recognition algorithm automatically recognizes bacterial colonies by comparison with its massive phenotyping database. Phenotypical analysis takes culture interpretation to another level. For urine cultures, for example, the algorithms not only segregate growth based upon cfu counts, but also classify cultures into Normal Genitourinary Flora (NGUF) or Contaminates and segregates these from "Significant Positive Cultures" that need ID, AST or further investigation. Automatic recognition of the genus and species of colonies growing on standard culture medium, combined with user defined rules, standardizes the interpretation of bacterial cultures and optimizes workflow efficiency. Colony recognition algorithms work with different types of investigations by combining user defined rules and apply them to different specimen types and specific organisms of interest, like Group A or Group B streptococcus, in swab cultures.

Application of User-Defined Expert Rules to Filter Outputs and Reporting

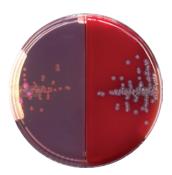
Each laboratory uses standard and unique rules for how they interpret bacterial cultures. PhenoMATRIX™ can apply each laboratory's personalized rules combined with demographic information from a patient's LIS record to provide a higher level of culture segregation, alerting the operator when a particular culture needs additional scrutiny. Users expert rules, plus patient demographic information, provide an additional filter for standard report outputs.





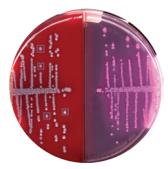


Automatic Detection of Organisms on any Chromogenic Medium





Colony Counting





Automatic Colony Recognition

Technologist Report to LIS: >105 cfu/ml E.coli Colony Recognition Software: >105 cfu/ml E.coli 99% probability Technologist Report to LIS: >10⁵ cfu/ml Enterococcus Colony Recognition Software: >10⁵ cfu/ml Enterococcus 99% probability



Expert Rules Filter

Sex: Female Age: 27

Colony Recognition: Presumptive Group B Streptococcus **Recommendation:** Confirm identification and AST work up