ABSTRACT, FINAL, B

TITLE: Expanding our Teaching Puppets, "The Culture Plate Gang": Dexter, The 2-Faced Clock

INTRODUCTION/BACKGROUND: In 2016, (ASM Boston), we introduced our "Culture Plate Gang", 8 43'puppets, commercially available, each highlighting a microbial topic, used in a unique, educational platform with ventriloquisms. Since, we have added 2 more puppets, the most recent Marco-Polo, to highlight the "Dual Citizenship" of microbes and humans, emphasizing the Hologenomic Theory. (www.globalbugs.com. Simultaneously, we created a Microbial Clock to visualize for students the microbial partnership between 8 chronic disease and changing phyla over a life time (0-100 yr.), recognizing 4 age categories with color codes, Green to Red.

GOALS/OBJECTIVES: Here, we wanted to expand the use of our Teaching Puppets, introducing Dexter, the Dual Face, hand crafted, Clock. His purpose was to create real change in 1) teaching and 2) clinical decision making, integration our 0-100 yr. Microbial Clock with the human, Biologic, circadian clock, a 24 hr day-night cycle, investigators receiving the 2017 Noble Prize in Medicine

METHODS: We reviewed the work of the 3 American Nobel Laurites, first recognized in 1984, highlighting the Period Gene, and 24 hr biologic regulation, synchronized with Earth Revolution, day and night. We simultaneously re-reviewed the published, microbiota data of our 8 chronic diseases and our Microbial Clock. The goal was to integrate both clocks as our 11th puppet, a rotating face, graphically, a circle within a circle, speaking 2 different languages for ventriloguism.

RESULTS: "Dexter" (German Origin), named Germ(Microbial) -Man (Biologic), was our resulting, hand crafted dual faced, rotating clock, Front and Back. Each represented their 5 key features, emphasizing the respective times, 0-100 yrs. vs 24 hrs., speaking German vs English, benefiting a unique teaching strategy. Clinically, the integration unmasked the use of Functionality, a consequence of both clocks linked to microbial phyla and Disease, highlighting combined regulation of lipid, protein, and carbohydrate metabolism; both clocks emphasized the importance of dual input for probiotic selection by microbial interventions using our previously reported Composite Disease Signature (ASM, 2017, New Orleans) potentially assisting in Directed, Precision Therapy (ASM, NO, 2015).

DISCUSSION/CONCLUSION: The awarding of the human Biologic Clock in 2017 as a Nobel Prize, added impetus to our Microbial Clock, the combining of each, maximizing a unique teaching tool, Dexter, a 2 faced puppet, Germ-Man, which as developed, has inherent, unrecognized clinical instruction for Microbial intervention. We are highlighting the 11 puppets with digitalized images as 'avatars', integrating into PPT presentations, to complement ventriloquism.