## ASM HOUSTON 2023 ASTRACT

## TITLE: BANKING ON A MICROBIAL CREDIT SCORE: EDUCATION OF THE AGING ELECTORATE

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KEY WORDS: Banking, Microbiota, Credit Score, Education

INTRODUCTION: Teaching microbiology to aged learners ("aged", >55yo) can be a difficult task given the unfamiliar content. Recently, this has been exacerbated via the weaponization of public health, necessitating the accurate education of this voting population; they will elect decision makers on their health programs when it counts most: retirement.

GOALS: Recognizing the dynamics of an aging population, we wanted to track aged participation in voting, recognizing electorate naivete in science; this also acted as a catalyst for expanding microbial education using a successful template that highlighted "a banking theme." (REF 1) Its purpose was to provide a common tool to measure microbial health over a lifetime: the Microbial Credit Score (MCS); it could track health decision affecting the human microbiota.

METHODS: We used US data for 5 recent presidential elections, 2000-2020, emphasizing voter registration and participation for the aged. The creation of the MCS to educate the aged via "banking", was discussed with a bank manager, bank credit manager, and bank risk manager. All supported the FICO Financial Credit Score model with financial points as a comparative template for our Microbial Credit Score.

RESULTS: The US population is aging, and characterized by an increase in voter registration and voting since 2000: up 17%. The Microbial Credit Score model was arbitrarily divided into 3 Sections, color coded from Green to Yellow/Orange, to Red, top to bottom; this corresponded to 850-750 pts., Good, 739-580 pts. Fair, and 579 -300 pts., Bad, with 660 deemed Neutral. For both the Financial Bank and the Microbial Bank, we compared parallel growth curves from 25-65 yr., "Accumulation", and 66-90 yr., "Protection", highlighting 3 'Wealth Disruptive Categories', each with 5 ranked, scored 'Impact Values' of +30, 0, and -30 pts. These included 'Behavioral Categories', but emphasized previous hospitalization, antibiotics, nursing home, dental care, and co-morbidities, where applicable. Ultimately, parallel Summary Plots were created for Financial and Microbial activity, at 6-time intervals, separated by 15 years from "Accumulation" to "Protection" as X(Score) vs Y(Time); Neutral score was 660pts for FICO and MCS, the start for score calculations.

CONCLUSION: Our 'Banking Theme' as an educational tool continues to expand, providing an understandable base for aged individuals not comfortable with science and at risk of misinformation. Here, we introduced a MCS, providing an active tool to compare their own microbial health to financial, a recognized score: Good, Fair, Poor.

## REFERENCES

1. Banking theme. 2 refererences

## ACKNOWLEDGEMENTS