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SEROLOGIC ASSAYS TO DIRECT PERSONALIZED DEMYELINATING DISEASE TREATMENT

DIAGNOSTICS

Bacteria and serologic assays to direct individualized multiple sclerosis treatment.

TECHNOLOGY TYPE

Therapeutics
Biomarkers

STAGE OF DEVELOPMENT

- Prototyping underway.

- Working towards microbial assay validation.

IP PROTECTION

Provisional patent filed.

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TECHNOLOGY SUMMARY

There are over 2 million people around the world who suffer from multiple sclerosis (MS). It can take a protracted period to identify the disease, and while there are more treatments to address MS than there were a decade ago, they often have serious side effects and none of the current treatments stop the disease.

University of Utah researchers have identified a series of bacteria whose presence is highly associated with demyelinating diseases, specifically MS. These bacteria have been used to create a set of microbial reagents for use in serologic assays to personalize antimicrobial treatment of MS. Treating MS with specific antibiotics to halt or prevent disease would significantly improve patient outcomes by treating the root cause with less serious side effects.

FEATURES AND BENEFITS

- Identification of MS through an assay.
- Directs individualized therapy of MS.
- Potential to direct treatment of other demyelinating diseases.

RECENT PUBLICATIONS

Kriesel, J. D., Bhetariya, P., Wang, Z., Renner, D., Palmer, C., & Fischer, K. F. (2019). Spectrum of Microbial Sequences and a Bacterial Cell Wall Antigen in Primary Demyelination Brain Specimens Obtained from Living Patients. *Scientific Reports*, 9(1). doi:[10.1038/s41598-018-38198-8](https://doi.org/10.1038/s41598-018-38198-8)

INVENTOR PROFILE

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