School of Optometry & Vision Science
UNSW Sydney

Research Study Title: **The role of bacteria in meibomian gland dysfunction**

Researchers at UNSW are conducting a project to assess whether there are differences between the microbes that are found on the eyes of healthy people and participants with blockage of the glands in your eyelids that deliver oil to your tears (meibomian gland dysfunction; MGD). We hope our findings will contribute to a better understanding of how bacteria affect MGD and ultimately could help improve the diagnosis, treatment, and overall understanding of the condition in the future.

We are looking recruit people who meet the following inclusion criteria:

1. Age 18 years or over.
2. Be able to read and comprehend English and provide informed consent.
3. Have either healthy meibomian glands or meibomian gland dysfunction.
4. Be able to attend UNSW School of Optometry and Vision Science clinic in person.

Participants meeting the following criteria will be excluded from the study:

1. Any active anterior eye disease.
2. History of eye trauma or surgery (including corneal refractive surgery) in the previous 12 months.
3. Any systemic disease that may affect ocular surface health, e.g., Graves' disease, and auto-immune diseases such as spondylitis, multiple sclerosis, and systemic lupus erythematosus.
4. Recent use of systemic and/or topical antibiotics.
5. Current use of anti-inflammatory drugs and immunosuppressive agents.
6. Recent use of topical glaucoma medications and over-the-counter eye drops containing preservatives.
7. Contact lenses in the past 3 months.
8. Pregnancy.
9. Known allergies to diagnostic stains, specifically fluorescein and lissamine green.
10. Known allergies to topical anesthetic eye drops.

Participants will be asked to complete the following activities if they agree to participate:

- Answer a paper-based questionnaire that will take approximately 5-10 minutes to complete.
- Attend one study visit at the School of Optometry and Vision Science, Rupert Myers Building Level 3, UNSW Sydney.

We expect that this visit will take approximately 50 minutes to complete. Participants will undergo evaluation for their vision, examination the front part of the lid margin, dry eye tests in the clinic, application of anesthetic to the eye and squeezing of eyelids to obtain oil and swabs.

A full description of all research activities, including any risks, harms or discomforts that you may experience while participating in this research is included in the attached Participant Information Statement and Consent Form.

Please contact the following person via email or phone to register your interest in taking part in the research:

Name Nebiyat Adimassu
Position PhD student
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If you have questions about the research and would like to contact the Chief Investigator, please contact the following person:

Chief Investigator

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Position Scientia Professor
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