

## What is this study about?

In keratoconus (KC) the structure of the cornea (a layer of tissue at the front of the eye) is changed and its strength is reduced. These structural changes alter the shape of the cornea, which in turn can cause myopia (short-sightedness) and irregular astigmatism (irregular shape of the cornea), affecting vision.

Corneal-collagen-crosslinking is a relatively new technique, which aims to increase the biomechanical strength of the cornea and hence stopping these unwanted shape changes. Despite strong evidence showing that corneal-collagen-crosslinking leads to increased biomechanical strength of human corneas, there is a significant need for accurate measures of these biomechanical changes before and after this procedure. Until recently technical limitations have restricted our ability to assess the effectiveness of the technique.

Utilising the latest imaging techniques this study aims to better understand the biomechanical strength of the eye before and after corneal-collagen-crosslinking.



# RESEARCH VOLUNTEERS NEEDED

## Biomechanical properties of keratoconic eyes\*

### What is our aim?

The primary goal of this investigation is to investigate regional biomechanical properties of the keratoconic eye before and after CXL.

### Who are we looking for?

We are recruiting healthy non-pregnant or breast feeding adults over 18 years who suffer from keratoconus and are enrolled for collagen crosslinking treatment.

### Is there remuneration for participation?

£20 of travel expenses will be provided to get to and from the study visits.



Are you interested to take part into  
new knowledge?

... then please contact us:



vCard



Website

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Please visit our website  
for more information:

[www.biomechanics-of-the-eye.com](http://www.biomechanics-of-the-eye.com)

Where will the study take place ?

Faculty of Health and Human Sciences

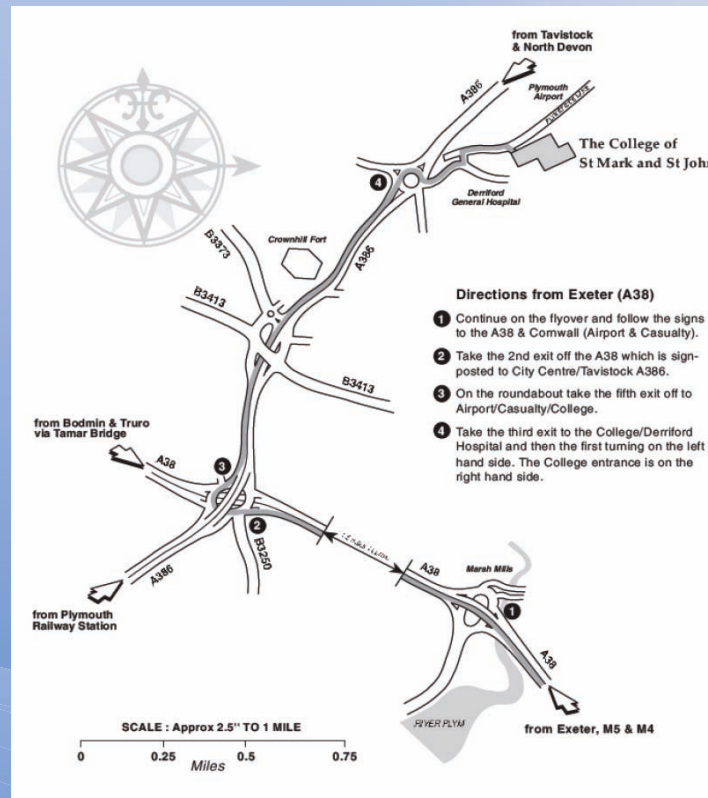
Plymouth University

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Find us:

Peninsula Allied Health Centre at  
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What are we going to do?

This study involves two study visits, one before your corneal collagen crosslinking treatment and one 3-6 months following your treatment. Each of these visits will take up to 120 minutes but please consider that this time frame can be different between each participant.

#### Visit 1

Pre-corneal collagen crosslinking treatment investigation (120 mins): A series of measurements will be taken before you undergo collagen crosslinking treatment.

#### Visit 2

The series of measurements conducted at visit 1 will be taken again 3-6 months after having collagen crosslinking treatment.

\*This study is proved and authorised by the ethical committee of the NHS and Plymouth University

