

## **Participant information sheet**

### **Ultrasound Tongue Imaging of Scottish Gaelic**

My name is Dr Claire Nance and I am a researcher at Lancaster University. I would like to invite you to take part in a research study about how sounds are produced in Gaelic. Please take time to read the following information carefully before you decide whether or not you wish to take part.

#### **What is the study about?**

This study will investigate how the tongue moves during the production of Gaelic speech sounds. Gaelic has not been extensively studied using ultrasound before, so our aim is to document the language and better understand how sounds are produced.

#### **Why have I been invited?**

I have approached you because we are interested in collecting data from a range of Gaelic speakers in Lewis. I would be very grateful if you would agree to take part in this study.

#### **What will I be asked to do if I take part?**

If you decided to take part, this would involve the following: I will ask you to read a list of Gaelic words. While you are reading we will record your speech using an ultrasound probe and microphone. In order to hold the ultrasound probe in place under your chin, I will ask you to wear an adjustable headset. I will spend some time adjusting the headset to make sure it is comfortable. After recording your speech I will ask a few questions about your background to allow us to understand patterns in the data. The whole process should take less than one hour.

#### **What are the possible benefits from taking part?**

Taking part in this study will contribute to the documentation of Gaelic and allow us to better understand how speech sounds are produced in this language. You will also be able to see an ultrasound image of your tongue moving during speech and see how different tongue shapes are used for different sounds.

#### **Do I have to take part?**

No. It's completely up to you to decide whether or not you take part. Your participation is voluntary.

#### **What if I change my mind?**

If you change your mind, you are free to withdraw at any time during your participation in this study. If you want to withdraw, please let me know, and I will extract any data you contributed to the study and destroy them. However, it is difficult and often impossible to take out data from one specific participant when this has already been anonymised or pooled together with other people's data. Therefore, you can only withdraw up to 2 weeks after taking part in the study.

#### **What are the possible disadvantages and risks of taking part?**

There are no major disadvantages involved in participating. Taking part in this study will involve contributing up to an hour of your time.

### **Will my data be identifiable?**

After the experiment has taken place, the data will only be accessible to myself and two other researchers involved in the project. All data will be anonymised and your personal information will be kept confidential.

### **How will we use the information you have shared with us and what will happen to the results of the research study?**

We will use the recordings of your speech in the following ways: The results will be presented at academic conferences and journal articles. We might also present the results at workshops for Gaelic teachers or speech therapists. When presenting the results, we might use videos or still images from the ultrasound. We might also use sound clips of individual words when presenting at conferences or workshops. Individual speakers will not be identifiable when we are presenting the data and your name and personal information will remain confidential.

### **How will my data be stored?**

Your data will be stored on a password-protected, encrypted laptop, and on Lancaster University's computer system. It will only be accessible to myself and the two other researchers working on the project. In accordance with University guidelines, we will keep the data securely for a minimum of ten years and for a maximum of twenty years to allow further analyses to take place.

### **What if I have a question or concern?**

If you have any queries or if you are unhappy with anything that happens concerning your participation in the study, please contact myself:

Dr Claire Nance  
Department of Linguistics and English Language  
Lancaster University LA1 4YL  
[c.nance@lancaster.ac.uk](mailto:c.nance@lancaster.ac.uk)  
01524 594 513

If you have any concerns or complaints that you wish to discuss with a person who is not directly involved in the research, you can also contact my Head of Department:

Professor Uta Papen  
Department of Linguistics and English Language  
Lancaster University LA1 4YL  
[u.papen@lancaster.ac.uk](mailto:u.papen@lancaster.ac.uk)  
01524 593 245

This study has been reviewed and approved by the Faculty of Arts and Social Sciences and Lancaster Management School's Research Ethics Committee.

For further information about how Lancaster University processes personal data for research purposes and your data rights please visit our webpage: [www.lancaster.ac.uk/research/data-protection](http://www.lancaster.ac.uk/research/data-protection).

**Thank you for considering your participation in this project.**

**Consent form**

**Project Title: Ultrasound tongue imaging of Scottish Gaelic**

Name of Researcher: Dr Claire Nance, email: c.nance@lancaster.ac.uk

**Please tick each box:**

1. I confirm that I have read and understand the information sheet for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily.	<input type="checkbox"/>
2. I understand that my participation is voluntary and that I am free to withdraw at any time during my participation in this study and within two weeks after I took part in the study, without giving any reason. If I withdraw within two of taking part in the study my data will be removed.	<input type="checkbox"/>
3. I understand that any information given by me may be used in future reports, academic articles, publications or presentations by the researcher/s, but my personal information will not be included and I will not be identifiable.	<input type="checkbox"/>
4. I understand that my name will not appear in any reports, articles or presentation without my consent.	<input type="checkbox"/>
5. I understand that my speech will be recorded and that data will be protected on encrypted devices and kept secure.	<input type="checkbox"/>
6. I understand that data will be kept according to University guidelines for a maximum of twenty years after the end of the study for research analyses.	<input type="checkbox"/>
7. I agree to take part in the above study.	<input type="checkbox"/>

\_\_\_\_\_  
Name of Participant

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature

If you are aged under 16, a parent or guardian must also sign to give their consent for you to take part:

\_\_\_\_\_  
Name of Parent/Guardian

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature

I confirm that the participant was given an opportunity to ask questions about the study, and all the questions asked by the participant have been answered correctly and to the best of my ability. I confirm that the individual has not been coerced into giving consent, and the consent has been given freely and voluntarily.

\_\_\_\_\_  
Name of Researcher

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature

**One copy of this form will be given to the participant and the original kept in the files of the researcher at Lancaster University**