Introduction to Survival Analysis

Workshop Orientation

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Workshop Instructor
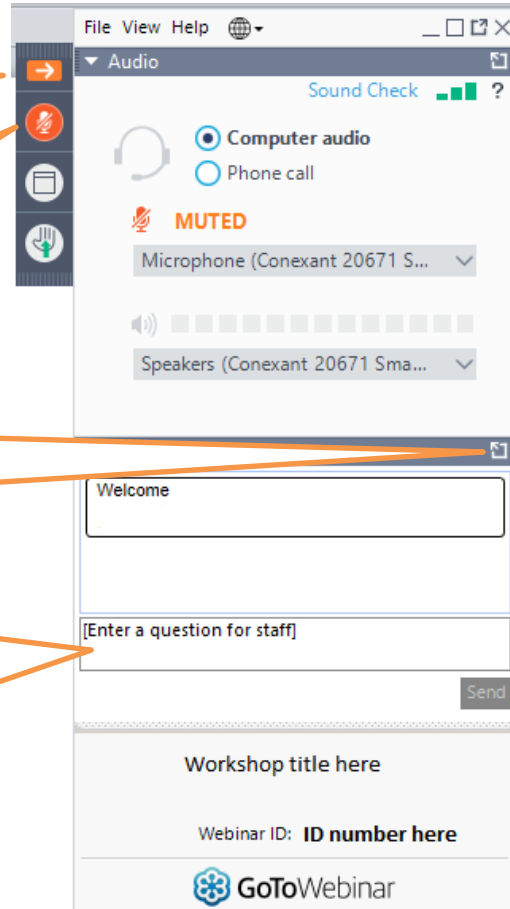
Part 1: Using GoToWebinar
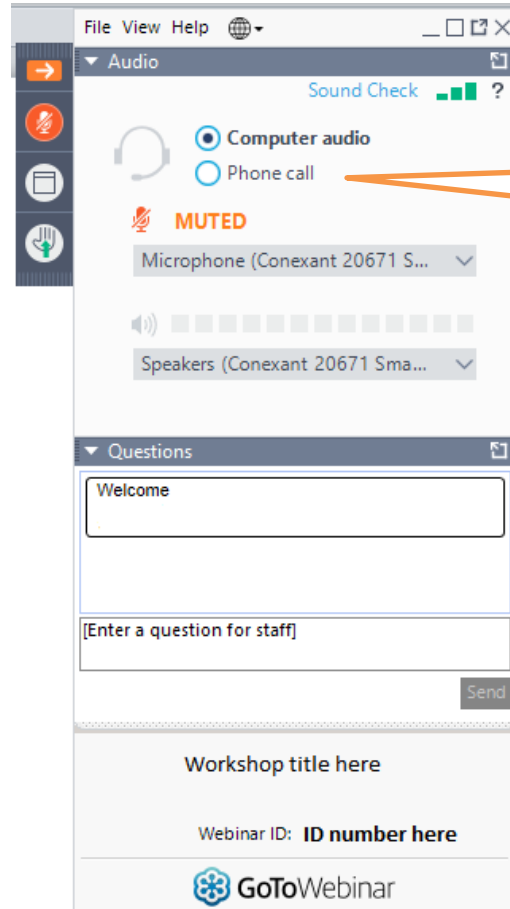
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Welcome

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Workshop title here

Webinar ID: ID number here

GoToWebinar

Audio Troubleshooting:

1. Switch audio to phone

2. Close all other applications, especially browser windows

3. Shut down GoToWebinar and log back in

Two ways to join the webinar

Link in GoToWebinar
reminder emails

1 day before
1 hour before

Link on the Survival
Analysis Workshop
site

Join Webinar

The Workshop Structure

Each Module

**Webinar Session
+ Handout**

**Step-by-Step
Software Demos
+ Syntax**

**Exercises
+ Solutions**

**Q&A Session
(+ Forum)**

Part 2: A Tour of the Workshop Website

Workshop Structure

Program Center Website

1. Logistics

- Calendar
- Go To Webinar link

2. Logistical Help

- Getting Started
- Support form
- FAQ

3. The Workshop Content

- Data Files and Descriptions
- Modules
- Recordings

4. Additional Materials

- Bonus Videos
- Extra Reading

Part 3: The Workshop Content

Module 1: The Kaplan-Meier Curve

- Constructing a Kaplan-Meier Curve

- Censoring and Its Assumptions

- Log Rank Test for Subgroup Comparisons

Module 2: The Hazard Function and the Cox Proportional Hazards Model

- Definition of a Hazard Function

- Constant Hazard vs Increasing or Decreasing Hazard

- Steps to Run Cox Regression Models and Interpret Model Coefficients

Module 3: Planning and Data Management Issues

- Data Set Up for Survival Analysis

- Compute and Compare Power

- Problems with Date Variables

Module 4: Cox Model: Model Fitting and Diagnostics for the Cox Model

- Multiple Predictor Variables

- Risk Adjustment

- Proportional Hazards

Module 5: Parametric Models

- Comparing Hazard Functions for Popular Distributions

- Interpreting Coefficients

- Understanding Advantages and Disadvantages

- Frailty Models

Module 6: Time-Varying Covariates in a Cox Model

- How to Code Data for Time-Varying Covariates

- Fit Time-Varying Models

- Competing Risks

- Interpreting the Results

Questions?