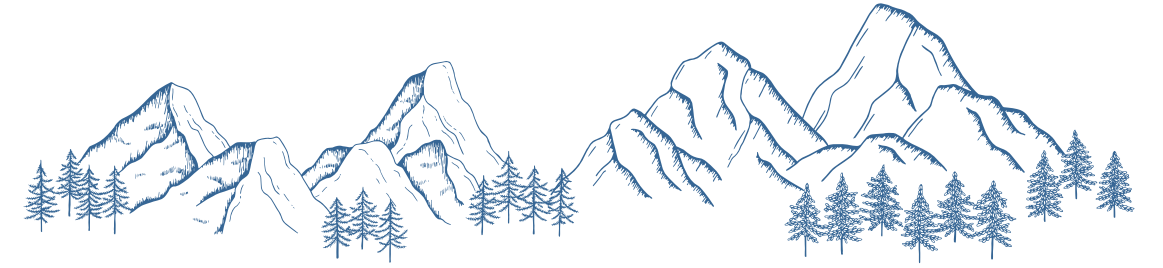


# Physiologic responses of older recreational alpine skiers to different skiing modes.

Scheiber et al. (2009)



## Research Purpose

To investigate select physiological responses among older recreational skiers during ski instructor-guided skiing on varying slopes while controlling speed.

## Methods

**Sample:** 9 older (56-71 years old) experienced skiers (1 F, 8 M)

**Tests:** 1 ergometer lab test, 4 on-snow ski tests in morning and in afternoon

**Analysis:** repeated measures ANOVA

## Results

### Lab vs. On-Snow:

Physiological variables measured during the on-snow testing were all well below the maximal performance laboratory ergometer test values.

**AM vs. PM:** No significant difference in skiing speed between morning and afternoon tests.

### Flat Slopes:

Regardless of speed, older skiers remained predominantly within an **aerobic** state.

### Steep Slopes:

Skiers maintained an **aerobic** state when skiing slowly.

Increased speed led to an **increase in the physiological demand** and in **anaerobic** metabolism.

## In Practice

Instructors may be able to reduce fatigue for older adult recreational skiers by managing the intensity of skiing through:

- Speed control
- Terrain choice
- Teaching efficient skiing technique

