

# Pharmacogenetics Clinical Research in Special Populations

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**Tuesday, July 11, 2023**

**12:00 – 1:00 pm PDT**

**Zoom Webinar (no RSVP necessary)**

**Meeting ID: 623 480 9105**

**Password: 7654321**

<https://ucsf.zoom.us/j/6234809105?pwd=R1NRSWJqZlpCazdJOTNZSk1ZQWNiZz09>

*One hour of Category 1 ACCENT credit given*

**Summary:**

Despite great scientific advancements in drug development, medication dosing is generally based on standard protocols and is rarely tailored to the individual patient, often resulting in decreased efficacy or increased risk of adverse effects, particularly in special populations such as burn patients with complex medical needs.

This lecture will discuss clinical research focusing on understanding interpatient variability in drug metabolism and response, the prevalence of variants in genes related to drug metabolism and pain response pathways and discuss clinical medications that may be impacted by these variants, specifically in pediatric burn and surgery patients. We will discuss the use of midazolam as a functional biomarker for CYP3A4 metabolism and its utility to diagnose phenoconversion. And lastly, we will discuss challenges with clinical pharmacogenetic research and implementation.