Over 300,000 deaths in the United States each year are caused by sudden cardiac death. The most common cause of sudden cardiac death is ventricular fibrillation. The application of strong electric shocks, termed defibrillation, is a very effective and well-established method of terminating fibrillation, but the underlying dynamics are still not well understood.

We begin with a brief overview of bioelectricity and fibrillation, followed by discussion of recently completed instrumentation projects whose goal is to acquire data that will improve our quantitative understanding of the response of cardiac tissue to applied electric fields, and ultimately defibrillation.

Please join us for light refreshments at 4:15pm outside SEB 203.