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On the cover: Measurements of calcium signal in a single ventricular myocyte during action potential conduction. Using dynamic clamp, an isolated ventricular myocyte was artificially electrically coupled to a real-time simulation of a model myocyte, and the calcium signal signal was recorded during the conduction (or the absence of conduction) of the action potential from the biological cell to the model cell. The cover shows that the calcium signal recorded in the biological myocyte rises faster and is larger when the electrical coupling allows conduction of the action potential to the model cell (bottom) than when no electrical coupling is simulated and no conduction of the action potential occurs (top). (Modified with permission from Wagner MB, Wang YG, Kumar, R, Golod DA, Goolsby WN, and Joyner RW. *Am Physiol Hear Circ Physiol* 278: H444—H451, 2000.) See Goillaud and Marder, p. 197.