

BIBLIOGRAPHY

Original Publications

- 1) **Spitzer KW**, Marvin DE and Heath AG: The effect of temperature on the respiratory and cardiac response of the bluegill sunfish to hypoxia. *Comp Biochem Physiol* 30:83-90, 1969
- 2) Zawacki BE, **Spitzer KW**, Mason AD and Johns LA: Does increased evaporative water loss cause hypermetabolism in burned patients? *Ann Surg* 171(2):236-240, 1970
- 3) Wilmore DW, Curreri PW, **Spitzer KW**, Spitzer ME and Pruitt BA: Supranormal dietary intake in thermally injured hypermetabolic patients. *Surg Gyn Obstet* 132(5):881-886, 1971
- 4) **Spitzer KW**, Morris AH and Arnold H: A valve assembly for studying pulmonary function in trauma patients. *J Thor Cardiovas Surg* 66(4):607-612, 1973
- 5) Morris AH and **Spitzer KW**: Lung function in convalescent burn patients. *Am Rev Resp Dis* 108:989-993, 1973
- 6) Hogan PM and **Spitzer KW**: Manganese and electrogenic phenomena in canine Purkinje fibers. *Circ Res* 36:377-391, 1975
- 7) **Spitzer KW** and Hogan PM: The effects of acidosis and bicarbonate on action potential repolarization in canine cardiac Purkinje fibers. *J Gen Physiol* 73:199-218, 1979
- 8) **Spitzer KW** and Walker JL: Changes in liquid-junction potential following chloride replacement in cat papillary muscle. *Pflügers Arch* 382:281-284, 1979
- 9) **Spitzer KW** and Walker JL: Intracellular chloride activity in quiescent cat papillary muscle. *Am J Physiol Heart Circ Physiol* 238:H487-H493, 1980
- 10) **Spitzer KW** and Walker JL: Intracellular chloride activity in cat ventricular muscle. Proc 28th International Congress of Physiological Sciences. (Physiol Sci Vol 8), Cardiovascular Physiology, Heart, Peripheral Circulation & Methodology, AGB Kovach, E Monos, G Rubanyi, eds. Pergamon Press, Oxford, 1980, pg 69-76
- 11) Burgess MJ, Steinhaus BM, **Spitzer KW** and Green LS: Effects of activation sequence on ventricular refractory periods of ischemic canine myocardium. *J Electrocardiol* 18(4):323-330, 1985
- 12) Steinhaus BM, **Spitzer KW** and Isomura S: Action potential collision in heart tissue: Computer simulations and tissue experiments. *IEEE Trans Biomed Eng BME-32*(10):731-742, 1985
- 13) Burgess MJ, Steinhaus BM, **Spitzer KW** and Ershler PR: Nonuniform epicardial activation and repolarization properties of the *in vivo* canine pulmonary conus. *Circ Res* 62:233-246, 1988
- 14) Burgess MJ, Steinhaus BM and **Spitzer KW**: Effects of activation sequence on repolarization properties of normal and ischemic myocardium. In *Cardiac Function Under Ischemia and Hypoxia* (Proc 2nd Int'l Symposium on Environmental Medicine, Nagoya Sept 26-27, 1985). Nagoya, University of Nagoya Press, 1986, pp 271-284
- 15) Steinhaus BM, **Spitzer KW**, Hirai M and Haws CW: Effect of heart rate on cardiac membrane resistance during repolarization. In *Proc IEEE/9th Ann Conf Eng Med & Biol Soc*, 1987, pp 216-218

- 16) Steadman BW, Moore KB, **Spitzer KW** and Bridge JHB: A video system for measuring motion in contracting heart cells. *IEEE Trans Biomed Eng* 35:264-272, 1988
- 17) Bridge JHB, **Spitzer KW** and Ershler PR: Relaxation of isolated ventricular cardiomyocytes by a voltage-dependent process. *Science* 241:823-825, 1988
- 18) **Spitzer KW** and Bridge JHB: A simple device for rapidly exchanging the solution surrounding a single cardiac cell. *Am J Physiol Cell Physiol* 256:C441-C447, 1989
- 19) Bers DM, Bridge JHB and **Spitzer KW**: Intracellular Ca transients during rapid cooling contractures in guinea-pig ventricular myocytes. *J Physiol* 417:537-553, 1989
- 20) Kohmoto O, **Spitzer KW**, Movsesian MA and Barry WH: Effects of intracellular acidosis on Ca_i transients, transsarcolemmal Ca fluxes, and contraction in ventricular myocytes. *Circ Res* 66:622-632, 1990
- 21) Bridge JHB, Smolley JR and **Spitzer KW**: The relationship between charge movements associated with I_{Ca} and I_{Na-Ca} in cardiac myocytes. *Science* 248:376-378, 1990
- 22) **Spitzer KW**, Steinhaus BM, Hirai M, Burgess MJ and Haws CW: Modulation of collision induced changes in canine heart repolarization by cycle length. *J Electrocardiol* 24(1):43-52, 1991.
- 23) Bridge JHB, Smolley J, **Spitzer KW** and Chin TK: Voltage dependence of sodium-calcium exchange and the control of calcium extrusion in the heart. *Ann NY Acad Sci* 639: 34-47, 1991
- 24) **Spitzer KW** and Bridge JHBB: Relationship between intracellular pH and tension development in resting ventricular muscle and myocytes. *Am J Physiol Heart Circ Physiol* 262:C316-327, 1992
- 25) Pollard AE, Burgess MJ and **Spitzer KW**: Computer simulations of the three-dimensional propagation in ventricular myocardium: Effects of intramural fiber votation and inhomogeneous conductivity on epicardial activation. *Circ Res* 72: 744-756, 1993
- 26) Chin TK, **Spitzer KW**, Philipson KD, and Bridge JHB: The effect of exchanger inhibitory peptide (XIP) on sodium-calcium exchange current in guinea pig ventricular cells. *Circ Res* 72:497-503, 1993
- 27) Zubair I, Pollard AE, **Spitzer KW** and Burgess MJ: Effects of activation sequence on the spatial distribution of repolarization properties. *J Electrocardiol* 27(2):115-127, 1994
- 28) Levi AJ, **Spitzer KW**, Kohmoto O and Bridge JHB: Depolarization-induced Ca entry via Na-Ca exchange triggers SR Ca release and phasic contraction in quinea pig cardiac myocytes. *Am J Physiol Heart Circ Physiol* 266:H1422-H1433, 1994
- 29) Xu P and Spitzer KW: Na-independent Cl^- - HCO_3^- exchange mediates recovery of pH_i from alkalosis in guinea-pig ventricular myocytes. *Am J Physiol Heart Circ Physiol* 267:H85-H91, 1994
- 30) Matsui H, Barry WH, Livsey C and **Spitzer KW**: Angiotensin II stimulates Na^+/H^+ exchange in quiescent adult rabbit ventricular myocytes. *Cardiovasc Res* 29:215-221, 1995
- 31) Burgess MJ, Pollard AE, **Spitzer KW** and Yang L: Effects of premature beats on repolarization of postextrasystolic beats. *Circulation* 92:1969-1980, 1995
- 32) Barry WH, Matsui H, Bridge JHB and **Spitzer KW**: Excitation-contraction coupling in ventricular myocytes: Effects of angiotensin II. In *Molecular and Subcellular Cardiology: Effects of Structure and Function*. Sideman S and R Beyar, eds. Plenum Press, New York, pp 31-39, 1995

- 33) Levi AJ, Li J, **Spitzer KW** and Bridge JHB: Effect on the indo-1 transient of applying Ca^{2+} channel blocker for a single beat in voltage-clamped guinea-pig myocytes. *J Physiol* 494(3):653-673, 1996.
- 34) Levi AJ, Li J, Litwin SE, **Spitzer KW**: Effect of internal sodium and cellular calcium load on voltage-dependence of the Indo-1 transient in guinea-pig ventricular myocytes. *Cardiovasc Res* 32:534-550, 1996
- 35) Litwin S, Kohmoto O, Levi AJ, **Spitzer KW** and Bridge JHB: Evidence that reverse Na-Ca exchange can trigger SR calcium release. *Ann NY Acad Sci* 779:451-463, 1996.
- 36) Pollard AE, **Spitzer KW** and Burgess MJ: Contributions of the specialized conduction system to the activation sequence in the canine pulmonary conus. Modeling in Physiology. *Am J Physiol Heart Circ Physiol* 42:H446-H463, 1997
- 37) Ito N, Bartunek J, **Spitzer KW** and Lorell BHP: Effects of the nitric oxide donor sodium nitroprusside on intracellular pH and contraction in hypertrophied myocytes. *Circulation* 95(9):2303-2312, 1997
- 38) **Spitzer KW**, Sato N, Tanaka H, Firek L, Zaniboni M and Giles WR: Electrotonic modulation of electrical activity in rabbit atrioventricular node myocytes. *Am J Physiol Heart Circ Physiol* 42:H767-H776, 1997
- 39) Yao A, **Spitzer KW**, Ito N, Zaniboni M, Lorell BH, Barry WH: The restriction of diffusion of cations at the external surface of cardiac myocytes varies between species. *Cell Calcium* 22(6): 431-438, 1997
- 40) Yao A, Matsui H, **Spitzer KW**, Bridge JHB, Barry WH: Sarcoplasmic reticulum and Na/Ca exchange function during early and late relaxation in ventricular myocytes. *Am J Physiol Heart Circ Physiol* 273:H2765-H2773, 1997
- 41) Yao A, Su Z, Nonaka A, Zubair I, **Spitzer KW**, Bridge JHB, Muelheims G, Ross T, Barry WH: Abnormal myocyte Ca^{2+} homeostasis in rabbits with pacing-induced heart failure. *Am J Physiol Heart Circ Physiol* 274:H1441-H1448, 1998
- 42) Sato N, Habuchi Y, Tanaka H, Kawamura Y, Kikuchi K, **Spitzer KW**, Giles WR: Electrophysiological heterogeneity of rabbit atrioventricular node cells: possible relationship to fast and slow pathways. *J Cardiol* 31(6):373-380, 1998 (Japanese)
- 43) Cordeiro JM, **Spitzer KW**, Giles WR: Repolarizing K^{+} currents in rabbit heart Purkinje cells. *J Physiol*, 508: 811-823, 1998
- 44) Huelsing DJ, **Spitzer KW**, Cordeiro JM, Pollard AE: Conduction between isolated rabbit Purkinje and ventricular myocytes coupled by a variable resistance. *Am J Physiol Heart Circ Physiol* 274:H1163-H1173, 1998
- 45) Skolnick RL, Litwin SE, Barry WH, **Spitzer KW**: Effect of ANG II on pH_i , $[\text{Ca}^{2+}]_i$ and contraction in rabbit ventricular myocytes from infarcted hearts. *Am J Physiol Heart Circ Physiol* 275:H1788-H1797, 1998
- 46) Zaniboni M, Yao A, Barry WH, Musso E, **Spitzer KW**: Complications associated with rapid caffeine application to cardiac myocytes that are not voltage clamped. *J Mol Cell Cardiol* 30:2229-2235, 1998
- 47) Huelsing DJ, **Spitzer KW**, Cordeiro JM, Pollard AE: Modulation of repolarization in rabbit Purkinje and ventricular myocytes coupled by a variable resistance. *Am J Physiol Heart Circ Physiol* 276:H572-H581, 1999
- 48) Su Z, Bridge JHB, Philipson KD, **Spitzer KW**, Barry WH: Quantitation of Na/Ca exchanger function in single ventricular myocytes. *J Mol Cell Cardiol* 31:1125-1135, 1999

- 49) Zaniboni M, Pollard AE, Yang L, **Spitzer KW**: Beat-to-beat repolarization variability in ventricular myocytes and its suppression by electrical coupling. *Am J Physiol Heart Circ Physiol* 278:H677-H687, 2000
- 50) **Spitzer KW**, Ershler PR, Skolnick RL, Vaughan-Jones RD: Generation of intracellular pH gradients in single cardiac myocytes with a microperfusion system. *Am J Physiol Heart Circ Physiol* 278:H1371-H1382, 2000.
- 51) Ritter M, Su Z, **Spitzer KW**, Ishida H, Barry WH: Caffeine-induced Ca^{2+} sparks in mouse ventricular myocytes. *Am J Physiol Heart Circ Physiol* 278:H666-H669, 2000
- 52) Huelsing DJ, **Spitzer KW**, Pollard AE: Electrotonic suppression of early afterdepolarizations in isolated rabbit Purkinje myocytes. *Am J Physiol Heart Circ Physiol* 279:H250-H259, 2000.
- 53) Huelsing DJ, Pollard AE, **Spitzer KW**: Transient outward current modulates discontinuous conduction in rabbit ventricular cell pairs. *Cardiovascular Research*, 49:769-779,2001.
- 54) Cordeiro JM, **Spitzer KW**, Giles WR, Ershler PE, Cannell MB, Bridge JHB: Location of the initiation site of calcium transients and sparks in rabbit heart Purkinje cells. *J Physiol (London)*, 531:301-314,2001.
- 55) Cordeiro JM, Bridge JHB, **Spitzer KW**: Early and delayed afterdepolarizations in rabbit heart Purkinje cells viewed by confocal microscopy. *Cell Calcium* 29(5):289-297, 2001.
- 56) Su Z, Sugishita K, Ritter M, Li F, **Spitzer KW**, Barry WH: The sodium pump modulates the influence of I(Na) on $[\text{Ca}^{2+}]_i$ transients in mouse ventricular myocytes. *Biophys J*. 80(3):1230-1237, 2001.
- 57) R.D. Vaughan-Jones, B.E. Peercy, J.P.Keener, **K.W. Spitzer**: Intrinsic H^+ ion mobility in the rabbit ventricular myocyte. *J Physiol (London)* 541: 139-158, 2002.
- 58) **K.W. Spitzer**, R.L. Skolnick, B.E. Peercy, J.P.Keener, R.D. Vaughan-Jones. Facilitation of intracellular H^+ ion mobility by CO_2/HCO_3 in rabbit ventricular myocytes is regulated by carbonic anhydrase. *J Physiol (London)* 541: 159-167, 2002.

REVIEWS

Spitzer KW, Bridge JHB and Barry WH: Action potential generation in heart cells. *Invest Radiol*, 21-10:819-825, 1986

Vaughan-Jones RD and Spitzer KW: Role of bicarbonate in the regulation of intracellular pH in the mammalian ventricular myocyte. *Biochem Cell Biology* 80: 579-596, 2002

BOOKS

None.

BOOK CHAPTERS

Spitzer KW and Vaughan-Jones RD: Regulation of Intracellular pH in Mammalian Cells. Chapter 1, In “*The Sodium-Hydrogen Exchange. From Molecule to its Role in Disease*”. eds. M. Avkiran and M. Karmazyn, Kluwer Academic Press, 2003, In Press.

ABSTRACTS

- 1) Morris AH, Spitzer KW: Lung function in patients convalescing from severe burns. Clin Res 19(2):517, 1971
- 2) Moylan JA, Wilmore DW, Spitzer KW and Pruitt BA: Pulmonary diffusion characteristics following administration of a parenteral fat emulsion. Surg Forum 23:218-220, 1972
- 3) Spitzer KW and Hogan PM: The effect of manganese on canine Purkinje and ventricular myocardial cells. The Physiologist 16(3):462, 1973
- 4) Hogan PM and Spitzer KW: Effects of manganese on potassium conductance in canine Purkinje fibers. The Physiologist 17(3):249, 1974
- 5) Hogan PM and Spitzer KW: Verapamil induced increases in Purkinje fiber automaticity. Fed Proc 34(3):375, 1975
- 6) Spitzer KW and Hogan PM: HCO_3^- and pH induced changes in action potential duration of cardiac Purkinje fibers. Fed Proc 36(3):416, 1977
- 7) Spitzer KW, Walker JL and Wier WG: Intracellular chloride activity in cardiac Purkinje fibers. Biophysical J 21:184, 1978
- 8) Steinhaus BM and Spitzer KW: Simulation of activation sequence effects in heart disease. IEEE Trans Biomed Eng BME-30-8:513, 1983
- 9) Steinhaus BM, Spitzer KW, Burgess MJ and Abildskov JA: Sustained reflection: A computer model of one-dimensional reentrant tachycardia. Circulation 72-3:237, 1985
- 10) Steinhaus BM, Spitzer KW and Burgess MJ: Conduction delays as revealed by activation pattern. In Abstracts of Papers at the Banff Satellite Symposium on Cardiac Muscle, 1986
- 11) Burgess MJ, Steinhaus BM, Spitzer KW and Ershler PR: Role of nonuniform activation on repolarization. Circulation 74-II:351, 1986
- 12) Bridge JHB, Spitzer KW and Ershler PR: Voltage dependent relaxation in voltage clamped guinea pig cardiac myocytes. Circulation 76-IV:473, 1987
- 13) Bridge JHB and Spitzer KW: Sodium-calcium exchange can mediate voltage dependent relaxation in guinea pig ventricular myocytes. Biophys J 53:436a, 1988
- 14) Bers DM, Bridge JHB and Spitzer KW: Intracellular (Ca) changes during rapid cooling contractures in guinea-pig ventricular myocytes. J Physiol (Lond), 407:133P, 1988
- 15) Bridge JHB and Spitzer KW: Separation of inward Ca current (I_{Ca}) and inward Na-Ca exchange current (I_{NaCa}) in isolated guinea pig ventricular myocytes. Biophys J 55:294a, 1989
- 16) Spitzer KW: HCO_3^-/Cl exchange in cat ventricular muscle. Biophys J 55:295a, 1989
- 17) Bridge JHB and Spitzer KW: A discrete $\text{Na}^+-\text{Ca}^{2+}$ exchange current accompanies the mechanical relaxation of isolated ventricular cells. J Physiol 418:168P, 1989
- 18) Bridge JHB, Spitzer KW and Smolley J: The voltage dependence of inward Na-Ca exchange current (I_{Na-Ca}) measured at elevated $[\text{Ca}^{2+}]_i$ in guinea pig ventricular cells. Biophys J 57: 11a, 1990

- 19) Spitzer KW, Skolnick RL, Bridge JHB and Walker JL: Effect of pH_i on resting tension in cat ventricular muscle. *Biophys J* 57:140a, 1990
- 20) Bridge JHB, Smolley J and Spitzer KW: Voltage and time dependence of inward Na/Ca exchange current in guinea pig ventricular cells. *J Gen Physiol* 96:40a, 1990
- 21) Chin TK, Spitzer KW and Bridge JHB: Activation of electrogenic Na/Ca exchange during twitches in isolated guinea pig ventricular cells. *J Gen Physiol* 96:40a, 1990
- 22) Chin TK, Spitzer KW and Bridge, JHB: Changes in the amplitude of Na-Ca exchange current following twitches in guinea pig ventricular cells. *Biophys. J.* 59:544a, 1991
- 23) Spitzer KW and Bridge JHB: pH_i -induced changes in ventricular myocyte length. *Biophys. J.* 59:468a, 1991
- 24) Chin TK, Spitzer KW, Philipson KD and Bridge JHB: Effect of exchanger inhibitory peptide (XIP) on I_{NaCa} in guinea pig ventricular cells. *Circulation* 84(4):167, 1991
- 25) Skolnick RL and Spitzer KW: Effect of isoproterenol on pH_i recovery from acid load in ventricular myocytes. *Biophys J* 61: A445, 1992
- 26) Xu P and Spitzer KW: Na-independent Cl/HCO_3 exchange in ventricular myocytes. *Biophys J* 61: A445, 1992
- 27) Xu P and Spitzer KW: Measurement of Cl_i in ventricular myocytes using a fluorescent indicator. *Biophys J* 61: A445: 1992
- 28) Xu P and Spitzer KW: Na-dependent Cl/HCO_3 exchange in mammalian ventricular myocytes. *FASEB J* 6(4): A1260, 1992
- 29) Skolnick RL and Spitzer KW: Effect of phorbol ester on recovery from acid load in adult ventricular myocytes. *Biophys J* 64: A207: 1993.
- 30) Levi AJ, Spitzer KW and Bridge JB: Evidence that Ca entry on the Na-Ca exchange is able to trigger Ca release from the sarcoplasmic reticulum (SR) and phasic contraction in ventricular myocytes isolated from the guinea-pig heart. *J Physiol* 459:405, 1993.
- 31) Kohmoto O, Spitzer, KW and Bridge JHB: Exchanger inhibitory peptide (XIP) blocks Na current induced contractions in guinea pig cardiac myocytes. *Circulation* 88(4):I-186, 1993
- 32) Spitzer KW: An improved rapid solution switcher for use with single isolated cells. *J Physiol* 476:10P,1994
- 33) Levi AJ, Bridge JHB and Spitzer KW: Trigger mechanisms for calcium release from the sarcoplasmic reticulum in cardiac myocytes. *The British Soc Cardiovasc Res* 7(3):19, 1994
- 34) Yang L, Sanguinetti MC, Pollard AE, Burgess MJ and Spitzer KW: Beat-to-beat variability in action potential duration of ventricular myocytes. *FASEB J* 9(3):A603, 1995
- 35) Spitzer KW, Yang L, Sanguinetti MC, Pollard AE and Burgess MJ: Asymmetrical response of action potential repolarization to electrical coupling in ventricular myocytes. *FASEB J* 9(3):A603, 1995

- 36) Levi AJ, Li J, Spitzer KW, Bridge JHB: Roles of L-type Ca channel and reverse Na-Ca exchange in triggering intracellular Ca release in isolated guinea-pig myocytes. *J Physiol* 487:14P, 1995
- 37) Livsey CV, Skolnick RL, Spitzer KW: Angiotensin II stimulates Na/H exchange in adult rabbit atrial myocytes. *FASEB J* 10(3):A315, 1996
- 38) Livsey CV, Skolnick RL, Spitzer KW: Effect of angiotensin II on Na/H exchange in rabbit atrial myocytes. *Physiologist* 39(3):144, 1996
- 39) Skolnick RL, Litwin SE, Spitzer KW: Reduced sensitivity of Na/H exchange to ATII in surviving myocytes from infarcted hearts. *J Mol Cell Cardiol.* 28(6): A166, 1996
- 40) Cordeiro JM, Spitzer KW, Giles WR: A comparison of repolarizing K⁺ currents in rabbit Purkinje cells and ventricular myocytes. *Biophys J* 72(2):A49, 1997
- 41) Yao A, Ito N, Zaniboni M, Spitzer KW, Lorell BH, Barry WH: "Fuzzy space" on the external surface of the cardiac myocyte has functional significance which varies between species. *J Invest Med* 45(1):120A, 1997
- 42) Spitzer KW, Cordeiro JM, Ershler PR, Giles WR, Bridge JHB: Confocal microscopy reveals that calcium transients in Purkinje myocytes are initiated at the cell periphery. *Circ* 96(8):1312, 1997
- 43) Spitzer KW, Steadman B, Nitz G, Levi AJ: An inexpensive, simple, mechanically stable and precision control motorized micromanipulator suitable for experiments on isolated single cells and small multicellular preparations. *J Physiol* 504:61P, 1997
- 44) Zaniboni M, Yao A, Barry WH, Musso E, Spitzer KW: Rapid caffeine application elicits action potentials in ventricular myocytes. *Biophys J* 74:A57,1998
- 45) Huelsing DJ, Spitzer KW, Cordeiro JM, Pollard AE: Conduction between isolated Purkinje and ventricular myocytes. *Biophys J* 74:A160,1998
- 46) Ryan KD, Skolnick RL, Spitzer KW: Endothelin-1 stimulates Cl/OH exchange in ventricular myocytes. *Biophys J* 74:A160,1998
- 47) Ryan K.D. and Spitzer KW: Endothelin-1 effects on Na/H exchange are mediated by a BQ123 insensitive receptor and PKC independent pathway in ventricular myocytes. *Biophys J* 76:A221,1999.
- 48) Huelsing DJ, Spitzer KW, Ryan KD, Pollard AE: Electrotonic suppression of early and delayed afterdepolarizations in electrically coupled, isolated ventricular myocytes. *Circulation* 100:I-846, 1999
- 49) Cordeiro JM, Spitzer KW, Bridge JHB: Early and delayed afterdepolarizations in rabbit Purkinje myocytes observed with confocal microscopy. *Biophys J* 78(1):223A, 2000
- 50) Vaughan-Jones RD, Ershler PR, Skolnick RL, Spitzer KW: Slow intracellular H⁺ mobility regulated by carbonic anhydrase activity in rabbit ventricular myocytes. *Biophys J* 78(1):223A, 2000
- 51) Spitzer KW, Ershler PR, Skolnick RL, Vaughan-Jones RD: Generation of intracellular pH gradients in single cardiac myocytes with a microperfusion system. *Biophys J* 78(1):224A, 2000
- 52) Vaughan-Jones RD, Ershler PR, Skolnick RL, Spitzer KW: Intracellular H⁺ mobility is facilitated by carbonic anhydrase in rabbit ventricular myocytes. *J Physiol* 527P, 2000
- 53) Heulsing DJ, SpitzerKW, Pollard AE: Injury current induces spontaneous activity in rabbit Purkinje myocytes. *Biophys J* 82(1):98a,2002

- 54) Zaniboni M, Peercy B, Swietach P, Rossini A, Spitzer KW, Vaughan-Jones RD: Intrinsic mobility of H⁺ ions (D_{app}^H) in guinea pig ventricular myocytes. *Biophys J* 82(1): 595a, 2002
- 55) Zaniboni M, Rossini A, Spitzer KW, Vaughan-Jones RD: H⁺ permeation through the cardiac gap junction. *Biophys J* 82(1): 633a, 2002

ORAL PRESENTATIONS

- 1) Spitzer KW, Tanaka H, Firek L, Giles WR. Electrotonic Modulation of Electrical Activity in Rabbit Atrioventricular Node Myocytes. 17 November, 1996, Banff Canada. Conference Title: Conference on Electrical Responses and Pharmacology of Mammalian A-V Node and Atrium.
- 2) Spitzer KW. Peptide Modulation of Cardiac Intracellular pH. August, 1998, Ann Arbor, Michigan. Annual Meeting of the International Society for Heart Research.
- 3) Spitzer KW, Zaniboni M, Yang L, Pollard AE: Suppression of beat-to-beat repolarization variability by electrical coupling in guinea pig ventricular myocytes. BMES/EMBS Meeting, Atlanta, GA, October, 1999.