

CURRICULUM VITAE

ANTZELEVITCH, CHARLES

Birthdate: *March 1951*

Married : *Wife: Brenda*
Children: Daniel, Lisa

EDUCATION

Queens College, City University of New York, 9/69 to 6/73
Flushing, N.Y. Biology Degree: B.A. 6/73

Upstate Medical Center, SUNY at Syracuse 9/73 to 7/77
Syracuse, N.Y. Pharmacology Degree: Ph.D. 5/78

POSITIONS HELD

8/77 to 8/80: Postdoctoral Fellow, Experimental Cardiology Department
Masonic Medical Research Lab., Utica, N.Y. 13504

2/80 to 6/83: Assistant Professor, Pharmacology Department
SUNY Health Science Center, Syracuse, N.Y. 14314

8/80 to 12/83: Research Scientist, Experimental Cardiology
Masonic Medical Research Laboratory

7/83 to 12/86: Associate Professor, Pharmacology Department
SUNY Health Science Center, Syracuse, N.Y.

12/86 to 11/95: Research Professor, Pharmacology Department
SUNY Health Science Center, Syracuse, N.Y.

1/84 to 6/84: Senior Research Scientist, Experimental Cardiology
Masonic Medical Research Laboratory

7/84 to present: **Executive Director**
Director of Research
Masonic Medical Research Laboratory

2/87 to present: **Gordon K. Moe Scholar**
(Chair in Experimental Cardiology - MMRL)

11/95 to present: **Professor of Pharmacology**
SUNY Health Science Center at Syracuse
Upstate University Hospital

ACADEMIC AND PROFESSIONAL HONORS

- Van Horne Award, Central N.Y. Heart Association 1982-1984
- Fellow, Cardiovascular Section, American Physiological Society 1984
- Gordon K. Moe Scholar (Chair in Experimental Cardiology) 1987
- Senior Investigator to First Place Winner of Young Investigator Award. North American Society for Pacing and Electrophysiology 1992
- Distinguished Service Award - RAM Medical Research Foundation 1994
- Leonard Horowitz Lecturer - Philadelphia Arrhythmia Group 1995
- Charles Henry Johnson Medal, Grand Lodge F. & A.M., NYS 1996
- Fellow, American College of Cardiology 1996
- **President, International Cardiac Electrophysiology Society 1996 – 1998**
- **Secretary/Treasurer, International Cardiac Electrophysiology Society 1998 - present**
- Senior Investigator to First Prize winner of NASPE YIA 1997
- Senior Investigator to Finalist in ISCE Young Investigator Award 1997
- Alfred Farah Lecturer - SUNY Health Science Center at Syracuse 1997
- Senior Investigator to Finalist in ACC Young Investigator Award 1998
- Boss of the Year (runner-up), Utica Observer-Dispatch 1998
- Vice-President for Science, American Heart Association, NYSA 1998 - 2000
- Senior Investigator to First Prize winner - ISCE Young Investigator Award 1999
- Paul N. Yu Research Award – American Heart Association 1999
- Distinguished Visiting Professor, Metrohealth Campus/Case Western Reserve U 2000
- Secretary, North American Society for Pacing and Electrophysiology 2000
- Senior Investigator to First Prize winner in NASPE Young Investigator Award 2000
- Speaker, Rijlant Lecture, International Congress of Electrocardiology 2001
- Distinguished Achievement Medal, Grand Lodge F. & A.M., NYS 2001
- Keynote Speaker, Dead Sea Symposium, Tel Aviv, Israel 2002
- Harveiane Lecturer, University of Padua, Padua, Italy 2002
- **Distinguished Scientist Award, North American Society of Pacing and Electrophysiology (NASPE) 2002**
- Senior Investigator to First Prize winner of Upstate NY Cardiac Electrophysiology Society Young Investigator Award 2002

- Senior Investigator to winner of Poster Competition at AHA Annual meeting 2002
- Senior investigator to finalist in Young Investigator Competition of the International Society of Computerized Electrocardiography. 2003
- **Excellence in Cardiovascular Science Award. NE Affiliate American Heart Association 2003**
- Senior investigator to winner of Gordon K Moe Young Investigator Award of the Upstate New York Cardiac Electrophysiology society, Syracuse, NY 2005
- Fellow, Heart Rhythm Society 2006
- Gordon K. Moe Lecturer, Cardiac Electrophysiology Society Annual Mtg. 2006
- **Carl J. Wiggers Award, American Physiological Society 2007**
- Senior investigator to winner of Gordon K Moe Young Investigator Award of the Upstate New York Cardiac Electrophysiology society, Rochester, NY 2007
- Scroll Award, Central New York Academy of Medicine, Utica, NY 2008

- (Who's Who in the World, Who's Who in America, Who's Who in the East, Who's Who in Technology Today, Who's Who in Science and Engineering, American Men and Women of Science, International Directory of Distinguished Leadership, Personalities of America, Outstanding People of the 20th Century, Dictionary of International Biography, 21st Century Award for Achievement, Who's Who Historical Society, One Thousand Great Americans, Outstanding Intellectuals of the 21st Century, the Contemporary Who's Who, 2000 Outstanding Scientists of the 21st Century, etc.)

SOCIETIES

- Fellow, American College of Cardiology (FACC)
- Fellow, American Heart Association (FAHA)
- Fellow, Cardiovascular Section, American Physiological Society
- Fellow, Heart Rhythm Society (FHRS)
- Secretary/Treasurer-Past President, Cardiac Electrophysiology Society
- Secretary, North American Society for Pacing and Electrophysiology
- Co-founder, Upstate New York Cardiac Electrophysiology Society
- Advisory Board Member, Central/Northern New York Heart Association
- Member, Basic Science Council, AHA
- Member, American Association for the Advancement of Science
- Member, American Physiological Society - FASEB
- Member, New York Academy of Sciences
- Member, International Society for Computerized Electrocardiography (ISCE)

- Corresponding Member, Argentine Society of Cardiology
- Honorary Lifetime Member, China Heart Rhythm Society

PROFESSIONAL AND PUBLIC SERVICE

American Heart Association, Research Peer Review Committee New York State Affiliate	1982 - 1986
American Heart Association Basic Science Council	1982 -
National Institutes of Health, Minority High School Student Research Apprentice Program, Program Director	1984 - 1985
National Institutes of Health, Ad Hoc Study Sections	1985 -
National Institute of Health, Training grant, Program Director	1985 - 1989
Board of Directors - Clinical Medical Network, Utica, N.Y.	1987 - 1995
Executive Committee	1991 - 1995
Board of Directors - Jewish Community Center, Utica, N.Y.	1987 - 1992
Board of Directors - RAM Medical Research Foundation, N.Y.S.	1989 -
Board of Directors - Central New York Heart Assoc., Utica, NY	1989 -
Board of Directors - Temple Beth El	1991 - 1997
2nd Vice-President	1992 - 1994
1st Vice-President	1994 - 1995
President	1995 - 1997
Research Committee - New York State Affiliate American Heart Association	1987 - 1990
Consultant - Inter-University Cardiology Institute, The Netherlands	1988 - 1991
Guest editor for Circulation	1987
Editorial Board - <i>Journal of Cardiovascular Electrophysiology</i>	1989 - present
Editorial Board - <i>NASPETAPES</i> - North American Society of Pacing and Electrophysiology Audio Journal	1991 - 2000

Editorial Board - <i>Journal of Cardiovascular Pharmacology and Therapeutics</i>	1996 - 2006
Editorial Board - <i>Journal of the American College of Cardiology</i>	1998 - 2002
Editorial Board - <i>Indian Pacing and Electrophysiology Journal</i>	2001 – present
Editorial Board – <i>Circulation</i>	March 2002 - present
Editorial Board – <i>Journal of Electrocardiology</i>	April 2002 – present
Editorial Board- <i>Heart Rhythm</i>	Nov. 2003- present
Editorial Board- <i>Current Cardiology Reviews</i>	May 2004 - present
Editorial Board- <i>PACE</i>	June 2004 – present
Editorial Board <i>Journal of Cardiovascular Pharmacology</i>	September 2004 - present
Editorial Board <i>Japanese Society of Cardiac Pacing and Electrophysiology</i>	September 2004 - present
Editorial Board – <i>Circulation: Arrhythmia and Electrophysiology</i>	March 2008 - present
International Board " <i>Revista Argentina de Cardiologia</i> " (RAC) official journal of the Argentine Society of Cardiology (SAC)	May 2006 – present
Publication Committee-World Symposium for Cardiac Pacing and Electrophysiology - PACE	1991
Science Fair Judge, Utica College	1988 - 1993
Institutional Review Board - Faxton Hospital, Utica, NY	1990 - present
Organizer/Co-Founder - Upstate New York Cardiac Electrophysiology Society. First Annual Meeting.	October 4, 1991
Fellowship Committee - North American Society for Pacing and Electrophysiology	1990 - 1993
Abstract Grader: American Heart Association	1987 - 1995
North American Society of Pacing	1998 - present

	and Electrophysiology	1990 - present
	American College of Cardiology	1993 - present
Consultant,	The Israel Science Foundation	1993
Member,	Young Investigator Committee- North American Society for Pacing and Electrophysiology	1993 - 1997
Chairman,	Young Investigator Award Committee, North American Society for Pacing and Electrophysiology	1994 - 1997
Secretary/Treasurer, International Cardiac Electrophysiology Society		1994 - 1996
President		1996 - 1998
Chairman,	Committee for Promotion of Basic Science, North American Society for Pacing and Electrophysiology	1995 - 1999
Organizer,	Upstate New York Cardiac Electrophysiology Society Annual Meeting	1995
Member,	Scientific Advisory Committee 3rd Biennial Intl. Symposium on Cardiac Arrhythmias. Cardiostim96	1995
Member,	Scientific Advisory Group Sudden Arrhythmia Death Syndrome Foundation (SADS)	1995-present
Co-Organizer,	Cardiac Electrophysiology Society (International) Annual Meeting - "Long QT Syndrome" - Anaheim, CA	1995
Fellow,	American College of Cardiology	1996
Member,	Long Range Planning Committee North American Society for Pacing and Electrophysiology	1996 -
Co-Organizer,	Cardiac Electrophysiology Society (International) Annual Meeting - "FIBRILLATION" - New Orleans, LA	Nov. 1996
Member,	Executive Scientific Committee XI th World symposium on Cardiac Pacing & Electrophysiology Berlin Germany, 1999	1997-1999
Member,	Board of Directors North American Society for Pacing and Electrophysiology	1997-2002

Chairman	Study Group I of the Northeast Research Consortium of the American Heart Association charged with evaluating AHA grants for the Northeast United States.	1997
Member	Scientific Advisory Boards of the International Academy of Cardiology and of the 1st International Congress on Heart Disease. Washington, DC.	1998
Chairman	Research Committee of the American Heart Association, NYS Affiliate.	1998 - 2000
Vice President for Science	AHA, New York State Affiliate	1998- 2000
Member	Executive Committee of the XI World Symposium on Cardiac Pacing, Berlin, Germany	June 26-30, 1999
Member	Panel of investigators of <i>Current Drugs</i>	
Member,	Publications Committee (and subcommittee) - North American Society for Pacing and Electrophysiology	1993 - 1996
Member,	Program Committee- North American Society for Pacing and Electrophysiology	1993 - 2002
Secretary/Treasurer	Cardiac Electrophysiology Society	1998 - present
Member	Scientific Advisory Board of the International Society of Heart Failure and the 7th World Congress of Heart Failure.	1999 - present
Corresponding Member -	Argentine Cardiology Society	1999 - present
Member	International Advisory Board for International Registry for Drug-induced Torsade de Pointes (Qtdrugs.net).	2000 - present
Member	Program Committee, American College of Cardiology	2001 – present
Participant	NASPE Future's Conference (Strategic Planning)	2001
Member	Scientific committee, Japan-Canada Conference on Arrhythmias. Satellite Symposium of XXIX ICE, Montreal, Canada.	2002
Member	Board of Directors of the International Society of Computerized Electrocardiography (ISCE)	2001-present
Member	NASPE Governance Committee	2002-2004

Member	Board of Director's of the Greater Utica Area American Heart Association	2003-2005
Member	Board of Director's of the Heart Rhythm Society Foundation	2005-2007
Member	Heart Rhythm Society Scientific and Clinical Documents Committee	2005-2007
Chairman	2005 International Society for Computerized Electrocardiology (ISCE) Annual Conference	2005
Member	International Board of the Argentine Journal of Cardiology	2007-present
Chairman	1st Worldwide Virtual Symposium on Drug-Induced QT Prolongation	2007
Editorial Board -	Archives of Medical Science	2007
Member, Advisory Board of Oxford University Program Project dealing with Computational Prediction of Drug Cardiac Toxicity		2007
Co-Chairman	1st Worldwide Internet Symposium on Drug-Induced QT Prolongation.Oct.	2007
Editorial Board -	Journal of Atrial Fibrillation	2008
Editorial Board -	Cell Biology Insights Journal	2008
Editorial Board –	Journal of Cardiovascular Pharmacology and Therapeutics	2009-present
Strategic Advisory Board (SAB) for Medtronic's Biotech Program		2008-present
Honorary Lifetime Member,	China Heart Rhythm Society	2009

Reviewer: Circulation
Circulation Research
Cardiovascular Research
Journal of Pharmacology and Experimental Therapeutics
American Journal of Physiology
The Journal of Clinical Investigation
The American Journal of Cardiology
Journal of the American College of Cardiology
PACE
Canadian Journal of Pharmacology and Physiology
Journal of Cardiovascular Electrophysiology
Journal of Cardiovascular Pharmacology and Therapeutics

Journal of Electrocardiology
Journal of Physiology (London)
European Heart Journal
European Journal of clinical Investigation
Journal of Cellular and Molecular Cardiology
Medical Letter
Europace
Current Opinion in Cardiology
Current Problems in Cardiology
Annals of Medicine
Trends IN Pharmacological Science
Expert Review Cardiovascular Therapy
Indian Pacing and Electrophysiology Journal
Israel Medical Association Journal
Current Drug Targets – Cardiovascular and Haematological Disorders
Biophysical Journal
European Journal of Genetics
Nature
Proceedings of the National Academy of Science
Current Cardiology Reports
ISHNE
Journal of Interventional Electrophysiology (**JICE**);
British Journal of Pharmacology
Anatomical Record
Archive of Medical Research
Current Cardiology Reviews
Expert Opinion
New England Journal of Medicine

AREA OF EXPERTISE and PRIMARY INTEREST

- Experimental Cardiology
- Cardiac Electrophysiology and Pharmacology
- Electrophysiological and pathophysiological basis of cardiac arrhythmias
- Pharmacology of antiarrhythmic agents
- Pharmacology of non-antiarrhythmic agents with cardiac actions
- Ischemic Heart Disease
- Sudden Cardiac Death
- Long QT Syndrome
- Brugada Syndrome
- Sudden Infant Death Syndrome (SIDS)

- Electrical heterogeneity as the basis for electrocardiographic (ECG) manifestations
- Cellular basis for the T wave in the ECG
- Cellular basis for the J wave
- Cellular basis for the pathophysiologic U wave
- Mechanisms underlying T wave alternans
- Mechanisms underlying QT dispersion
- Mechanism underlying the Early Repolarization Syndrome
- Electrical heterogeneity as the basis for pharmacologic distinctions in the heart
- Interpretation of the ECG and Monophasic Action Potential (MAP) Recordings
- Molecular Biology of ion channels in the heart
- Ionic distinctions among different cell types in the heart
- Molecular Genetics of inherited cardiac death and arrhythmia syndromes

- Related Areas: General electrophysiology, pharmacology, pathophysiology
 Clinical cardiology, cardiac electrophysiology, pharmacology

INVITED LECTURES AT NATIONAL AND INTERNATIONAL MEETINGS:

Workshop on Electrocardiography and Clinical Electrophysiology.
Buenos Aires, Argentina.

1. "Characteristics of conduction across an area of block"
2. "Frequency-dependent alterations of conduction in Purkinje fibers"
3. "Electrotonic inhibition and summation"

July 13-17, 1981

Cardiac Electrophysiology Society Annual Meeting. At 55th Scientific Sessions of the American Heart Association, Dallas, Texas. "A canine model of cardiac dysrhythmias occurring across inexcitable segments of tissue".

November, 1982

International Symposium on Cardiac Arrhythmias.
"Reflected reentry: Electrophysiology and Pharmacology"
Amelia Island, Florida.

May, 1984

American Heart Association Council on Clinical Cardiology.
Postgraduate Seminar. Miami Beach, Florida.
"Reflections".

November, 1984

Cardiac Electrophysiology Society. Symposium in honor of Richard Langendorf. Washington, D.C.
"Reflections and Parasystole".

November, 1985

- International Symposium. Nieuwegein/Utrecht,
The Netherlands. "Alternative approaches to management of
Ventricular Tachycardia" October, 1986
- American Heart Association Council on Basic Science and
Cardiac Electrophysiologic Society - Postgraduate Seminar.
Anaheim, California, "Parasytolic and Reentrant
Interactions Under Anisotropic Conditions". November, 1987
- Think Tank on Mechanisms of Atrioventricular Conduction.
Ootmarsum, The Netherlands. May, 1988
- Cardio-Stim 88. 6th International Congress, Monaco
1. "Reflection as a Subclass of Reentrant Cardiac Arrhythmias"
2. "Quinidine-induced Early Afterdepolarizations and
Triggered Activity". June, 1988
- Inter-American Congress of Pharmacology and Clinical Pharmacology.
Caracas, Venezuela. "Testing of Antiarrhythmic Drugs in *In Vitro*
Models. Clinical Implications". October, 1988
- Twenty Years of Evolving Arrhythmia Concepts. An international
symposium in honor of Mauricio R. Rosenbaum. Utrecht,
The Netherlands. "Quinidine-induced Triggered Activity" April, 1989
- North American Society of Pacing and Electrophysiology. Toronto,
Canada. "Clinical Relevance of Basic Electrophysiology" and
"Mechanisms of Action of Antiarrhythmic drugs". May 4-6, 1989
- International Symposium on Comparative Electrocardiology.
Amsterdam, The Netherlands. "Electrotonic Modulation". October, 1989
- Hoffman Symposium. International symposium in honor of Brian
Hoffman, Naples, Florida. "Determinants of Abnormal
Conduction" Workshop. October, 1990
- Think Tank on Mechanisms of Atrioventricular Conduction.
Ootmarsum, The Netherlands. Part II. April, 1991
- First International Symposium on Cardiac Arrhythmias.
Nice, France "Endocardium vs. Epicardium: What are
the differences ?". June 17-21, 1992
- International Cardiac Electrophysiology Society. New Orleans,

Louisiana.	November, 1992
American Heart Association special program entitled "Myocardial Heterogeneity". New Orleans, Louisiana.	November, 1992
International Symposium on Reentrant Arrhythmias. Reentry Workshop. Case Western Reserve. Cleveland, Ohio.	Nov. 20, 1992
Inter-university Cardiology Institute. Utrecht, The Netherlands.	April 27-28, 1993
International workshop on Antiarrhythmic Drugs - Mechanisms of Antiarrhythmic and Proarrhythmic Actions. "Selective Pharmacological Modification of Repolarizing Currents", Munster, Germany.	May 19-21, 1993
International Union of Physiological Sciences Congress, Glasgow, Scotland.	August 1, 1993
Cardiac Electrophysiology Symposium, Keystone, Colorado.	August 14, 1993
Japanese Circulation Society - Annual Scientific Sessions. "Gordon K. Moe Memorial Lecture", Tokyo, Japan.	March 28, 1994
North American Society of Pacing and Electrophysiology. Nashville. "The Role of M Cells in the Generation of U waves, Triggered Activity and Torsade de Pointes"	May 13, 1994
North American Society of Pacing and Electrophysiology. Nashville. "Ventricular Repolarization and Arrhythmias - Clinical Tutorial"	May 12, 1994
Second International Symposium on Cardiac Arrhythmias, Nice, France Debate: "M Cells are Responsible for Afterdepolarizations that Contribute to Torsade de Pointes (TdP)". Cardiostim94	June 15, 1994
Keynote Speaker, Long QT Meeting - SADS Foundation Dinner Dallas, TX	Nov. 13, 1994
Sudden Arrhythmia Death Syndromes (SADS) Foundation Boca Raton, Florida	January 7-9, 1995
International Society of Computerized Electrocardiography Amelia Island Florida, Florida	May 2, 1995
Cardiac Pharmacology Symposium, Slovakia	September, 1995

Myocardial Ion Changes and the Physiology of Cardiac Arrhythmias Death Valley (<i>Could not attend</i>)	February 22-26, 1996
Presenter, Distinguished Scientist Award at the American College of Cardiology Scientific Sessions, New Orleans	March 27, 1996
North American Society of Pacing and Electrophysiology. Seattle. "Potassium Channels and Heterogeneity of Myocardial Refractoriness - Core Curriculum "	May 17, 1996
Invited Speaker, Ventricular Tachycardia and Ventricular Fibrillation symposium. From channel proteins to clinical solutions. LaQuinta, CA	May 19-21, 1996
Third International Symposium on Cardiac Arrhythmias, Nice, France	June 19-22, 1996
23rd International Congress of Electrocardiology Cleveland, Ohio	July 31, 1996
New Era in the Treatment of Cardiac Arrhythmias: Electrical Therapy Bali, Indonesia (Represented by Dr. Gan-Xin Yan)	August 31-Sept.1, 1996
Symposium on Monophasic Action Potentials Munich, Germany	December 7, 1996
International Society for Cardiac Electrocardiography	April 30, 1997
Task Force on QT Interval and T Wave New Orleans	May 7-10, 1997
Advances in Electrophysiology and Cardiac Arrhythmias: A Renaissance Phuket, Thailand	February 5-8, 1998
International Society for Holter and Non-invasive Cardiology at the American College of Cardiology annual meeting	March 28, 1998
Clinical Tutorial entitled "QT Dynamics-Channels to Mapping. QT Variability, QT Dispersion, and Lessons from Optical Mapping" at the annual meeting of the North American Society of Pacing and Electrophysiology, San Diego, CA	May 7, 1998
Fourth Biennial Congress on Cardiac Arrhythmias (Cardiostim98) Nice, France	June 17-20, 1998.
International Society for Holter and Non-invasive Cardiology at Cardiostim98 Nice, France	June 18, 1998.

- Annual meeting of the South Atlantic Electrophysiology Society, Pinehurst, North Carolina
October 15-17, 1998.
- International symposium sponsored by the European Society of Cardiology titled “Dispersion of Ventricular Repolarization”, Lund, Sweden
May 31-June 2, 1999.
- International Society for Computerized Electrocardiography - Annual Scientific Sessions, Nara, Japan,
April 20-25, 1999
- 20th Scientific Sessions of NASPE in Toronto, Canada . Mini-course #4 Arrhythmia mechanisms underlying LQTS in the intact heart.
May 12, 1999
- 20th Scientific Sessions of NASPE in Toronto, Canada . Core Curriculum #16. Dispersion of repolarization in myocardium. Where does it come from?
May 15, 1999
- 14th annual meeting of the Japanese Pacing and Electrophysiology Society, Okayama, Japan
May 26-27, 1999
- European Society of Cardiology Policy Conference – QT Prolongation
European Heart House, Sophia Antipolis, France
June 24-25, 1999
- XI th Word Symposium on Cardiac Electrophysiology and Pacing
Berlin, Germany
June 26-30, 1999
- XII Inter-American Congress of Cardiology, Buenos Aires, Argentina,
August 22-25, 1999
- International symposium: “Fighting Sudden Cardiac Death: A Worldwide Challenge” Paris, France
September 30-October 2, 1999
- Asian Pacific Symposium on Cardiac Electrophysiology and Pacing, Taiwan
December 10-12, 1999
- Vth annual symposium on Mechanisms and Management of Atrial Fibrillation.
Boston, MA
January 28-29, 2000
- Emerging Concepts in the Treatment of Cardiac Arrhythmias in the new Millennium
Puhket, Thailand
February 11-13, 2000
- European Society of Cardiology Symposium. The potential for QT prolongation and proarrhythmia by non-antiarrhythmic drugs. Pathophysiology, clinical presentation, drug development and regularity issues. Sophia Antipolis, France
April 3-4, 2000

The Future of Cardiac Arrhythmology – Symposium in Honor of Professor Dr. Hein Wellens, Maastricht, The Netherlands	April 16-19, 2000
Cardiostim 2000 Role of the M cells Nice, France (could not attend)	June 14-17, 2000
ISCE Yosemite, CA	April 29- May 5, 2000
NASPE (Core Curriculum and Mini-course) Washington, DC	May 17-20, 2000
XXVII International Congress on Electrocardiology Milan, Italy	June 27 – July 1, 2000
LQTS Symposium , XI'AN, China (did not attend)	July 2-5, 2000
36th Congress of the Japanese Pediatric Cardiology Kagoshima, Japan	July 6-8, 2000
Study Group on the Molecular Basis of Arrhythmias (Working Group on Arrhythmias European Society of Cardiology), Noordwijk, The Netherlands	August 28-Sept. 2, 2000
International Congress on Cardiac Electrophysiology and Pacing and 9 th Congress of ISHNE, Istanbul, Turkey	September 23-27, 2000
Sicilian Gambit Chatham, Cape Cod, Massachusetts	October 15-19, 2000
American Heart Association, Council on Basic Cardiovascular Science	November 13, 2000
International Society of Cardiac Electrocardiography Hutchinson Island, FL	April 21-26, 2001
22 nd Annual Scientific Sessions, North American Society for Pacing and Electrophysiology Core Curriculum 15 Core Curriculum 21	May 4, 2001 May 4, 2001
28 th International Congress of Electrocardiology, Sao Paulo, Brazil Rijlant Lecturer	June 26, 2001
Japan Electrocardiology Society, Tokyo, Japan	October 2-4, 2001
Asian-Pacific symposium on Cardiac Pacing and Electrophysiology, Beijing, China	October 13-16, 2001

Dead Sea Symposium, Israel – Keynote Speaker	March 6-8, 2002
North American Society for Pacing & Electrophysiology, San Diego	May 8-11, 2002
The Einthoven Foundation. 100 th Anniversary of Electrocardiography Leiden, the Netherlands	June 9-11, 2002
Harveiane Lecture Series, Padua University, Padua, Italy	June 12-16, 2002
Cardiostim 2002, Nice, France	June 19-22, 2002
Japan-Canada Conference on Arrhythmias. Satellite of XXIX ICE, Montreal Canada	July 1-2, 2002
International Society of Electrocardiology International Society of Bioelectromagnetism, Montreal, Canada	July 2-6, 2002
Acute Ischemia and Infarction, Montreal, Canada – Facilitator	July 6, 2002
International Society for Heart Research (Symposium in honor of Harry Fozzard), Madison WI	July 24-27, 2002
V th International Congress of Cardiology, Lima, Peru (3 lectures)	August 22-24, 2002
British Physiological Society Meeting , Leeds, UK	September 10-12 2002
French Institute for Health (INSERM) Conference Sudden Cardiac Death and ion Channel Remodeling, France	October 5-9, 2002
American Heart Association Scientific Sessions, Chicago, IL	November 17-20, 2002
FDA/DIA/NASPE Conference on QT Prolonging Drugs, Washington DC	January 13-15, 2003
XII World Congress on Cardiac Pacing and electrophysiology Hong Kong	February 19-22, 2003
Safety of QT Prolonging Drugs, Philadelphia, PA	March 24-25, 2003
American College of Cardiology (ACC) Annual Scientific Sessions Chicago, IL	March 30-April 2, 2003

International Society of Computerized Electrocardiography (ISCE) Salt Lake City, Utah	April 26-May 1, 2003
North American Society for Pacing and Electrophysiology (NASPE) Annual Scientific Sessions, Washington DC.	May 14-17, 2003
International Congress of Electrocardiography, Helsinki, Finland	June 15-17, 2003
New Leaders in Cardiology and Electrophysiology (NELCEP) Fort Myers, FL	June 26-29, 2003
3 rd World Congress on Heart Disease, Washington, DC (not attended)	July 12, 2003
XIVth Paavo Nurmi Symposium- Genetic and Molecular basis for Cardiac Arrhythmias. Helsinki Finland.	August 27-29, 2003
Brugada Syndrome Consensus Conference	September 10-14, 2003
Europace, Paris France	December 12-16, 2003
ACC	March 9, 2004
ISCE, Hutchinson Island, FL	April 28-May2, 2004
Amsterdam Lecture, Amsterdam, The Netherlands	May 18, 2004
Heart Rhythm Society Annual Scientific Sessions, San Francisco, CA	May 21-24, 2004
Symposium on the New Science of QT Prolonging Drugs, San Francisco, CA	May 21, 2004
Workshop on Computer Modeling, Cap DAil, France	June 12-15, 2004
Cardiostim, Nice, France (4 Presentations)	June 2004
International Congress of Electrocardiology, Kyoto, Japan	June 27-July 1, 2004
Sudden Cardiac Death Symposium, Haifa, Israel	October 10-13, 2004
Dead Sea Symposium, Tel Aviv, Israel	October 17-20, 2004
American Heart Association Scientific Sessions, New Orleans, LA	November 7-10, 2004
Faiberg's Cardiac Workshop, Sintra, Portugal	January 15-19, 2005

American College of Cardiology Scientific Sessions, Orlando, FL	March 6-9, 2005
International Union of Physiologists Congress, San Diego, CA	March 29-31, 2005
Heart Rhythm Society Scientific Sessions, New Orleans, LA	May 4-7, 2005
International Congress of Electrophysiology, Gdansk, Poland	June 1-4, 2005
International Meeting of the Journal of Internal Medicine and Royal Swedish Academy of Sciences, Stockholm, Sweden	June 16-17, 2005
Atrial Fibrillation & Ventricular Arrhythmia Management Symposium, Milwaukee, WI	September 29-30, 2005
University of Colima, Mexico 3 rd International Workshop, Colima, Mexico	November 20-23, 2005
Japanese Circulation Society Meeting, Nagoya, Japan	March 24-26, 2006
4 th Fairberg Cardiac Workshop, Charleston, SC	April 23-27, 2006
Heart Rhythm Society Scientific Sessions, Boston, MA	May 17-20, 2006
Cardiostim, Nice, France	June 14-17, 2006
International Congress of Electrophysiology, Cologne, Germany	June 28-July 1, 2006
8 th International Dead Sea Symposium, Tel Aviv, Israel	October 15-16, 2006
17th Annual Gordon K. Moe Lecture, Cardiac Electrophysiology Annual Meeting, Chicago, IL	November 11, 2006
American Heart Association Scientific Sessions, Chicago, IL	November 11-15, 2006
International Society of Electrophysiology, Cancun, Mexico	April 21-26, 2007
Experimental Biology Meeting, Washington, DC	April 28-May 2, 2007
Heart Rhythm Society Scientific Sessions, Denver, CO	May 9-12, 2007
Japanese Heart Rhythm Society, Hiroshima City, Japan	May 31-June 2, 2007
European Cardiac Arrhythmia Society, Marseille, France	June 3-5, 2007
12th Congress of the International Society for Holter & Noninvasive	

Electrocardiology (ISHNE), Athens, Greece	June 7-9, 2007
Fairberg Cardiac Workshop, Antalya, Turkey	September 16-20, 2007
American Heart Association Scientific Sessions, Orlando, FL	November 3-7, 2007
Heart Rhythm Society Scientific Sessions, San Francisco, CA	May 14-17, 2008
University of Montreal Symposium on Ventricular Arrhythmias, Montreal, Canada	May 21-22, 2008
Japanese Heart Rhythm Society, Hiroshima City, Japan	May 31-June 2, 2008
Cardiostim, Nice, France (3 Lectures)	June 18-21, 2008
9 th International Dead Sea Symposium, Tel Aviv, Israel	September 22-24, 2008
International Symposium on Ventricular Arrhythmias, Miami, FL	October 24, 2008
6 th International Winter Arrhythmia School, Mount Tremblant, Quebec, Canada	February 6-8, 2009
St. Jude Medical Cellular Electrophysiology and Mechanisms of Arrhythmias, San Francisco, CA	March 12-15, 2009
Fairberg Cardiac Workshop, Haifa, Israel	March 29-April 1, 2009
International Society of Computerized Electrocardiography (ISCE) Panama City Beach, FL. Kenichi Harumi Plenary Address	April 23-27, 2009
Heart Rhythm Society Scientific Sessions, Boston, MA	May 13-16, 2009
China Heart Rhythm Society Meeting, Kunming, china	May 24, 2009
Xi'an International Symposium on J-Wave Syndromes, Xi'an, China	May 26, 2009
International Symposium on J-Wave Syndromes, Beijing China	May 28, 2009
1 st Korean Integrated Arrhythmia Symposium, Korea Heart Rhythm Society Seoul, Korea	June 12-13, 2009
Japanese Heart Rhythm Society, Kyoto, Japan	July 2-4, 2009
American Heart Association Scientific Sessions, Orlando, FL	November 14-18, 2009

St. Jude Medical Cellular Electrophysiology and Mechanisms of Arrhythmias, San Francisco, CA	March 4-7, 2010
Heart Rhythm Society Scientific Sessions, Denver, CO	May 12-15, 2010
Cardiostim, Nice, France	June 16-19, 2010
Japanese Circulation Society, Yokohama, Japan	March 18-20, 2011
Asia Pacific Heart Rhythm Society (APHRs), Yokohama, Japan	September 20-22, 2011

Other Invited Scientific Presentations (1994-present only)

Monsanto-Searle Pharmaceuticals, Chicago, Illinois	January 12, 1994
WIBX Radio, American Heart Association Heart Radiothon	February 1994
Invited Speaker, University of Rochester School of Medicine and Dentistry, Department of Cardiology, Rochester, NY.	February 17, 1994
Invited Speaker, Grand Chapter, Royal Arch Masons	March 1994
Invited Speaker, New York Hospital-Cornell Medical Center, Cardiology Department, New York, NY.	August 29, 1994.
Invited Speaker, University of Pittsburgh Medical School, Department of Physiology and Biophysics	October 12, 1994
Keynote Speaker, Greater Los Angeles Cardiac Electrophysiology Society, West Hollywood, California	December 19, 1994
Grand Rounds, Cedar-Sinai Medical Center, West Hollywood, California	December 20, 1994
Monsanto Searle, St. Louis, MO	January 16, 1995
WIBX Radio, American Heart Association Heart Radiothon	February, 1995
Presenter, Distinguished Scientist Award to D.P. Zipes, North American Society for Pacing and Electrophysiology, Boston, MA	May 6, 1995
Leonard Horowitz Lecturer - Philadelphia Arrhythmia Group	May 23, 1995

Cardiology Grand Rounds, The Lankenau Hospital, Wynnewood, PA	May 24, 1995
Presenter, Distinguished Scientist Award of the American College of Cardiology to Douglas P. Zipes, M.D.	March, 1996
Invited Speaker, Cleveland Clinic	April 16, 1996
Cardiology Grand Rounds, Case Western Reserve University - Medicine	April 17, 1996
Invited Speaker, Minisymposium on Cardiac Arrhythmias. Maastricht, The Netherlands	June, 1996
Invited Speaker, Leiden University Medical Center, The Netherlands	June, 1996
Invited Speaker, UCSF, Cardiology	November, 1996
Guest Speaker, Bay Area Electrophysiology Society	November, 1996
Guest Speaker, Update in Electrocardiography and Arrhythmias Symposium, UCSF, San Francisco, CA	November, 1996
Invited Speaker, Pediatric Cardiology, NYU Medical Center, NYC	January, 1997
Grand Rounds, Cardiology section, Woodhull Medical Center, Brooklyn NY	January, 1997
Alfred Farah- Sterling Lecturer, SUNY Health Science Center, Syracuse, NY	May 21, 1997
Invited Speaker, St. Louis University Health Science Center	Sept. 4, 1997
Invited Speaker. Harvard Medical School-Beth Israel Hospital, Boston, MA.	December 8, 1997
Invited Speaker, Northwestern University Medical Center, Chicago. IL.	January 8, 1998
Invited Speaker, St. Elizabeth Hospital, Utica, NY	June 30, 1998
Invited Speaker, Cardiology Dept., University of North Carolina (two lectures) Chapel Hill, NC	October 15, 1998
Invited Speaker, South Atlantic EP Society	October 16-17,1998
Invited Speaker, Cardiovascular Group. University of Calgary Medical School	

	December 7, 1998
Cardiology Grand Rounds, NYU Medical School	February 4, 1999
Cardiology Grand Rounds - Massachusetts General Hospital, Boston	March 31, 1999
Invited Speaker, Boehringer Ingelheim, Osaka, Japan	May 30, 1999
Invited Speaker, University of Maastricht, The Netherlands	June 30-July 2, 1999
Invited Consultant, University of Leiden, The Netherlands	September 27-28, 1999
Invited Consultant, University of Amsterdam, The Netherlands	September 28-29, 1999
Invited Speaker and Consultant, Physiome, Princeton, NJ	November 18-19, 1999
Invited Speaker and Consultant, Pfizer, Groton, Conn.	December 1, 1999
Cardiology Grand Rounds, St. Luke's Roosevelt Hospital	January 12, 2000
Columbia University, P&S	January 10, 2000
Invited Speaker and consultant, DuPont, Wilmington, DE.	March 7, 2000
Consultant, Physiome, Princeton, NJ	March 8, 2000
Distinguished Visiting Professor, Heart and Vascular Research Center, Metrohealth Campus of Case Western Reserve University	March 21, 2000
Cardiology Grand Rounds and Consultant University of Rochester Medical Center	August 24, 2000
Rhythms Fast and Slow, Roosevelt Hotel, NYC	December 1-2, 2000
Cardiology Grand Rounds and Cardiology Fellows Seminar Series University of Oklahoma Medical School	December 3 & 4; 2000
Cardiology Grand Rounds and Cardiology Seminar Series University of Michigan Medical School	December 6, 2000
Cardiology Grand Rounds Beth Israel Deaconess Medical Center	January 19, 2001

St. Joseph's Hospital, Syracuse, NY	February 1, 2001
Physician's Group	February 2, 2001
ECG Group	
CV Therapeutics	February 23, 2001
Pfizer, Groton, CT	August 7-8, 2001
Physiome , Princeton, NJ	September 9-12, 2001
Xian Jiao Tong University Medical School, Xian, China	October 12, 2001
Aventis Pharmaceutical, Bridgewater, NJ	November 28, 2001
Northwestern University Medical School, Chicago, IL	December 4, 2001
Loyola University Medical School, Physiology Department Chicago, IL	December 5, 2001
Eli Lilly Pharmaceutical, Indianapolis, IN	February 11, 2002
Cardiology Grand Rounds, Indiana University School of Medicine	February 11, 2002
Hartford Hospital Hartford CT	August 6; 2002
Cardiology Grand Rounds at the Brigham and Women's Hospital, Harvard Medical School, Boston, MA	March 20, 2003
Cardiology Grand Rounds at the Lankenau Hospital, Philadelphia, PA,	March 26, 2003.
Cardiology Grand Round; University of Texas in Galveston	June 4, 2003
Cardiology Grand Rounds, Southwestern Medical Center, Univ. of Texas	June 6, 2003
New Leaders in Cardiology and Electrophysiology (NELCEP) Fort Myers, FL	June 26-29, 2003
CV Therapeutics, Palo Alto, CA	July 15-16, 2003
Merck Research Laboratories, Philadelphia, PA	August 11-12, 2003
Glaxo Smith Kline, King of Prussia, PA	August 12-13, 2003
Solvay Pharmaceutical, Atlanta, GA	August 15, 2003

Brugada Syndrome Consensus Conference, Lake Placid, NY	September 10-14, 2003
FDA Presentation – PPD	October 1, 2003
Solvay Pharmaceuticals, Weesp, The Netherlands	November 17-20, 2003
WCNY TV	December 2, 2003
FDA Advisory Committee Meeting – CVT	December 9, 2003
Cardiology Grand Rounds – Montefiore Medical Center	February 3, 2004
Physiology Seminar – Molecular Cardiology Institute – Stony Brook HSC	February 4, 2004
Cardiology Grand Rounds, Washington University, St. Louis, MO	March 31-April 1, 2004
University of Utrecht, The Netherlands	May 18, 2004
Pfizer Advisory Council Meeting, Ann Arbor, MI	June 10, 2004
Wyeth-Solvay Advisory Board Meeting	August 31, 2004
Distinguished Lecture Series, University of Utah, Salt Lake City, UT	February 17, 2005
Cardiology Grand Rounds, Brookdale University Hospital, Brooklyn, NY	March 17, 2005
CV Therapeutics, Palo Alto, CA	March 29, 2005
CV Therapeutics Global EP Advisory Meeting, Palo Alto, CA	May 3, 2005
Zensun Scientific Advisors Meeting, Shanghai, China	May 23-25, 2005
Hoffmann-La Roche, Basel Switzerland	May 30, 2005
Cardiology Grand Rounds, The Care Group, Indianapolis, Indiana	August 30, 2005
Cardiology Grand Rounds, Boston Univ. Medical Center, Boston, MA	September 7, 2005
Heart Care Association, Milwaukee, WI	September 30, 2005
Cardiology Grand Rounds, Penn State Medical Center, Hershey, PA	October 17, 2005
QT Prolongation & Proarrhythmic Risk Expert Roundtable Meeting, Dallas, Texas	November 17, 2005

National Research Scientific Sessions for Students of Medicine, University of Guadalajara, Guzman City, Mexico	November 22, 2005
Cardiology Grand Rounds, University of Connecticut Health Center School of Medicine, Farmington, CT	January 11, 2006
Visiting Professorship and Cardiology Grand Rounds, New York University, New York, NY	January 12, 2006
Visiting Professorship and Cardiology Grand Rounds, Heart Care Associates, Milwaukee, WI	February 15, 2006
Pfizer QTAC Expert Panel Meeting, Atlanta, GA	March 10, 2006
Visiting Professorship, Niigata University, Niigata, Japan	March 28, 2006
Biodesign New Arrhythmia Technologies Retreat, Stanford University, Stanford, CA	April 1, 2006
Symposium in honor of Dr. Jerome Liebman, Case Western University, Cleveland, OH	May 4, 2006
Cardiology Conference, MetroHealth, Cleveland, OH	May 5, 2006
Cardiology Grand Rounds at Brookdale University Hospital and Medical Center, Brooklyn, NY	September 14, 2006
Atrial Fibrillation & Ventricular Arrhythmia Management Symposium, Milwaukee, WI	September 25-26, 2006
Slocum Dickson 5th Annual Teaching Day, Utica, NY	November 4, 2006
Enablex Cardiology Advisory Board Meeting, Philadelphia, PA	November 16-17, 2006
Novartis Cardiovascular Expert Roundtable Meeting, Washington, DC	December 8, 2006
Cardiology Grand Rounds at the University of Rochester, Rochester, NY	December 13, 2006
12th Annual Boston Symposium on Atrial Fibrillation, Boston, MA	January 11-13, 2007
Cardiology Grand Rounds at the University of Nebraska, Omaha, NE	February 16, 2007
Medtronic State of the Art 2007 Symposium, Tempe, Arizona	February 23-24, 2007

EP Conference, University of Alabama at Birmingham, Birmingham, AL	March 15, 2007
Ventricular Arrhythmia and Sudden Death Symposium, San Francisco, CA	April 20-22, 2007
Medtronic Risk Stratification Forum, Minneapolis, MN	July 23-24, 2007
EnVivo Pharmaceuicas Review Meeting, Boston, MA	June 18, 2007
Atrial Fibrillation & Ventricular Arrhythmia Management Symposium, Milwaukee, WI	September 7-8, 2007
Chairman, Central NY Academy of Medicine Teaching Day, Utica, NY	October 18, 2007
13 th Annual Boston Symposium on Atrial Fibrillation, Boston, MA	January 17-19, 2008
Washington University CBAC Seminar, St. Louis, MO	January 28, 2008
Cardiome Pharma Corp. Seminar, Vancouver, Canada	February 27, 2008
University of British Columbia Seminar, Vancouver, Canada	February 28, 2008
CV Therapeutics Seminar, Palo Alto, CA	March 13, 2008
Ventricular Arrhythmia and Sudden Death Symposium, San Francisco, CA	March 14-16, 2008
CVT Advisory Board Meeting, Chicago, IL	March 27, 2008
University of Montreal Symposium on Ventricular Arrhythmias, Montreal, Canada	May 21-22, 2008
CVT Ranexa Meeting, Boston, MA	June 27-29, 2008
SUNY-Stony Brook School of Medicine, Stony Brook, NY	July 14-15, 2008
Upstate New York Cardiovascular Research Symposium, Rochester, NY	December 5, 2008
Boston Atrial Fibrillation Symposium, Boston, MA	January 15-17, 2009
Cardiology Grand Rounds at Boston Medical Center, Boston, MA	September 9, 2009
Virginia Commonwealth University School of Medicine 14 th Annual Ramsey Lecturer in Physiology & Biophysics, Richmond, VA	October 21, 2009

Atrial Fibrillation & Ventricular Arrhythmia Management Summit,
Chicago, IL

December 4-5, 2009

Gilead Sciences Seminar, Palo Alto, CA

March 3, 2010

Current Grant Awards

NHLBI, NIH "Electrical Heterogeneity and Cardiac Arrhythmias"
HL 47678 4/93 - 8/09
(\$1.75 Million Direct Costs 2005-2010)
Principal Investigator: C. Antzelevitch

NHLBI, NIH
Mentored Minority Faculty Development Award
"Modulation of K_{Ca} channels
by the beta1 subunit"
Period: 4/01/03 – 3/31/08 (\$508,000)
PI: G. Perez
Mentor: C. Antzelevitch

NYSTEM
NY State Department of Health
"Induced Pluripotent Stem Cells Derived Cardiomyocytes as *In Vitro* Models of Early
Repolarization Syndrome and Sudden Cardiac Death. "
9/1/2010- 8/31/2013 \$1,080,000

TOTAL GRANT AWARDS (1977 – present): \$24,781,297

TRAINEES:

Postdoctoral level

Jorge M. Davidenko, M.D.	1982 - 1985
Xiaotong Shen, M.D.	1982 - 1984
Hector Vetulli, M.D.	1985 - 1986
Lawrence Cohen, M.D.	1986 - 1988

Joan Seif, Ph.D.	1988 - 1988
Silvio Litovsky, M.D.	1985 - 1990
Anton Lukas, Ph.D.	1986 - 1989
Serge Sicouri, M.D.	1987 - 1991
Arthur Iodice, Ph.D.	1987 - 1993
Subramaniam Krishnan, M.D.	1988 - 1991
Jean-Francois Roubache, M.D.	1993 - 1993
Vladislav Nesterenko, Ph.D.	1991 - 1993
Jose M. Di Diego, M.D.	1988 - 1993
Da-Wei Liu, M.S.	1990 - 1994
Zi Qing Zhang, M.D.	1992 - 1995
Gan-Xin Yan, M.D., Ph.D.	1994 - 1997
Alexander Burashnikov, Ph.D.	1994 - 1999
Zhuo-Qian Sun, M.D., Ph.D.	1994 - 1998
Wataru Shimizu, M.D., Ph.D.	1996 - 1998
George Thomas, Ph.D.	1998 – 2001
Shunichiro Miyoshi, M.D.	1998 – 1999
Tetsuro Emori, M.D.	1998 – 2000
Masahiko Kondo, M.D.	1999 – 2001
Rajendra Mannava, M.D.	1999 – 2003
Jeffrey Fish, D.V.M.	2000 – 2004
Masato Tsuboi, M.D., Ph.D.	2001 – 2004
Gi-Byoung Nam, M.D.	2002 – 2004
Sumer Dhir, M.D.	2003 – 2004
Joseph Yammine, M.D.	2004 – 2005
Hector Barajas	2004 – 2005, 2007 – 2008
Helen Diana, M.D., Ph.D.	2004 – 2008
Yoshiyasu Aizawa, M.D., Ph.D.	2005 – 2007
Chinmay Patel, M.D.	2005 – 2007
Marcela Ferreiro, M.D.	2006 – 2008
Eyal Nof, M.D.	2007 – 2008
Yoshino Minoura, Ph.D.	2009 –
Valerio Giovinazzo	2010 -

Doctoral level

Vito Lamanna, M.D. Ph.D. 1981

Thesis: “Effects of Lidocaine on Conduction Through Depolarized Canine False Tendons and on a Model of Reflection.”

Todd Richard M.S. 2000

PUBLICATIONS

a. Original articles and book chapters:

1. **Antzelevitch C.** Cardiac Actions of Quinidine. Doctoral Thesis. SUNY Upstate Medical Center, Syracuse, 1977.
2. Jalife J, **Antzelevitch C.** Phase resetting and annihilation of pacemaker activity in cardiac tissue. *Science*, 206:695-697, 1979.
3. **Antzelevitch C**, Jalife J, Moe GK. Characteristics of reflection as a mechanism of reentrant arrhythmias and its relationship to parasystole. *Circulation*, 61:182-191, 1980.
4. Jalife J, **Antzelevitch C.** Pacemaker annihilation: Diagnostic and therapeutic implications. *Am Heart J*, 100:128-130, 1980.
5. Moe GK, Jalife J, **Antzelevitch C.** Mechanism of ventricular arrhythmias: comparison of experimental models of parasystole and reentry. *In: Ambulatory Electrocardiographic Recordings*, Wenger NK, Mock MB, Ringqvist I, eds. Year Book Publishing, Chicago, IL, 1981.
6. Moe GK, **Antzelevitch C**, Jalife J. Premature Contractions: reentrant or parasystolic? *In: Cardiac Arrhythmias, a Decade of Progress*, Harrison DC, ed. Hall Medical, Boston, MA, 1981.
7. **Antzelevitch C**, Moe GK. Electrotonically-mediated delayed conduction and reentry in relation to "slow responses" in mammalian ventricular conducting tissue. *Circ Res*, 49:1129-1139, 1981.
8. Lamanna V, **Antzelevitch C**, Moe GK. Effect of lidocaine on conduction through depolarized canine false tendons on a model of reflected reentry. *J Pharmacol Exp Ther*, 221:353-361, 1982.
9. Moe GK, Jalife J, **Antzelevitch C.** Models of parasystole and reentry in isolated Purkinje fibers. *Proc Mayo Clinic*, 57(suppl):14-19, 1982.
10. **Antzelevitch C**, Jalife J, Moe GK. Electrotonic modulation of pacemaker activity. Further biological and mathematical observations on the behavior of modulated parasystole. *Circulation*, 66:1225-1232, 1982.
11. Jalife J, **Antzelevitch C**, Moe GK. The case for modulated parasystole. *Pacing Clin Electrophysiol*, 5:911-926, 1982.
12. **Antzelevitch C**, Jalife J, Moe GK. Frequency-dependent alterations of conduction in Purkinje fibers. A model of phase 4 facilitation and block. *In: Frontiers of Cardiac Electrophysiology*, Rosenbaum MB, Elizari MV, eds. Nijhoff, Hingham, MA, 1983.

13. Jalife J, **Antzelevitch C**, Moe GK. Models of parasystole and reflection. *In: Frontiers of Cardiac Electrophysiology*, Rosenbaum MB, Elizari MV, eds. Nijhoff, Hingham, MA, 1983.
14. **Antzelevitch C**. Clinical applications of new concepts of parasystole, reflection and tachycardia. *Cardiol Clin*, 1: 39-50, 1983.
15. Jalife J, **Antzelevitch C**, Lamanna V, Moe GK. Rate-dependent changes in excitability of depressed cardiac Purkinje fibers as a mechanism of intermittent bundle branch block. *Circulation*, 67:912-922, 1983.
16. **Antzelevitch C**, Moe GK. Electrotonic inhibition and summation of impulse conduction in mammalian Purkinje fibers. *Am J Physiol*, 245:H42-H53, 1983.
17. **Antzelevitch C**, Bernstein MJ, Feldman H, Moe GK. Parasystole reentry and tachycardia. A canine preparation of cardiac dysrhythmias occurring across inexcitable segments of tissue. *Circulation*, 68:1101-1115, 1983.
18. Moe GK, **Antzelevitch C**. Mechanisms of cardiac dysrhythmias. *In: Pathophysiology. Altered regulatory mechanisms in disease*, 3rd ed. Frolich ED, ed. Lippincott, Philadelphia, PA, 1984.
19. Davidenko JM, **Antzelevitch C**. The effect of milrinone on conduction, reflection and automaticity in canine Purkinje fibers. *Circulation*, 69:1026-1035, 1984.
20. **Antzelevitch C**, Davidenko JM, Shen XT, Moe GK. Reflected reentry: electrophysiology and pharmacology. *In: Cardiac Electrophysiology and Arrhythmias*, Zipes DP, Jalife J, eds. Grunne and Stratton, New York, 253-264, 1985.
21. Davidenko JM, **Antzelevitch C**. The effects of milrinone on action potential characteristics, conduction, automaticity and reflected reentry in isolated myocardial fibers. *J Cardiovas Pharm*, 7: 341-349, 1985.
22. Reiner VS, **Antzelevitch C**. Phase resetting and annihilation in a mathematical model of sinus node. *Am J Physiol*, 249:H1143-H1153, 1985.
23. Davidenko JM, **Antzelevitch C**. Electrophysiological mechanisms underlying rate-dependent changes of refractoriness in normal and segmentally depressed canine Purkinje fibers. The characteristics of post-depolarization refractoriness. *Circ Res*, 58:257-268, 1986.
24. Shen XT, **Antzelevitch C**. Mechanisms underlying the antiarrhythmic and proarrhythmic actions of quinidine in a model of reflected reentry. *Circulation*, 73:1342-1353, 1986.
25. **Antzelevitch C**. Mechanisms underlying reentrant cardiac arrhythmias. Reflection and Circus Movement (Invited paper). *Proceedings of the Symposium in honor of Dr. Mauricio Rosenbaum*, Buenos Aires, 1987.

26. Moe GK, **Antzelevitch C**. Reflection as a mechanism of reentrant cardiac arrhythmias. A brief review. Invited review. *Physiologia Bohemoslovaca*, 36:243-253, 1987.
27. Litovsky S, **Antzelevitch C**. Transient outward current prominent in canine ventricular epicardium but not endocardium. *Circ Res*, 62:116-126, 1988.
28. **Antzelevitch C**. Reflection as a mechanism of reentrant cardiac arrhythmias. *Prog Cardiol*, 1/1:3-16, 1988.
29. Davidenko JM, Cohen L, Goodrow R, **Antzelevitch C**. Quinidine-induced early-afterdepolarizations and triggered activity in canine Purkinje fibers. The effect of potassium and magnesium. *Circulation*, 79:674-686, 1989.
30. **Antzelevitch C**, Lukas A, Litovsky S. Reflection as a subclass of reentrant cardiac atrial arrhythmias. *In: The Atrium in Health and Disease*, Attuel P, Coumel P, Janse MJ, eds. Futura Publishing Co. Mt. Kisco, NY, 43-64, 1989.
31. Litovsky S, **Antzelevitch C**. Rate dependence of action potential duration and refractoriness in canine ventricular endocardium differs from that of epicardium. The role of the transient outward current. *J Am Coll Cardiol*, 14:1053-1066, 1989.
32. Lukas A, **Antzelevitch C**. Reflected reentry, delayed conduction and electrotonic inhibition in segmentally depressed atrial tissues. *Can J Physiol Pharmacol*, 67:757-764, 1989.
33. **Antzelevitch C**, Davidenko JM, Sicouri S, Cohen L, Iodice A, Goodrow R, Gintant GA. Electrophysiologic effects of quinidine in canine Purkinje fibers and ventricular myocardium. Slow development of the antiarrhythmic and arrhythmogenic effects of the drug. *In: Recent Advances in Pharmacology and Therapeutics*, Velasco M, Israel A, Romero E, Silva H, eds. Ecerpta Medica, New York, 259-263, 1989.
34. **Antzelevitch C**, Davidenko JM, Sicouri S, Cohen L, Iodice A, Goodrow R, Gintant G. Early afterdepolarizations and triggered activity. *J Electrophysiol*, 3:323-328, 1989.
35. Davidenko JM, Farah AF, **Antzelevitch C**. Effects of milrinone on atrioventricular conduction in the canine heart under normal conditions, during atrial flutter and after ligation and reperfusion of the septal artery. *J Cardiovasc Electrophysiol*, 1:93-102, 1990.
36. **Antzelevitch C**, Litovsky S, Lukas A. Ventricular epicardium vs. endocardium. Electrophysiology and pharmacology. *In: Cardiac Electrophysiology, from Cell to Bedside*, Zipes D and Jalife J. eds, W. B. Saunders, New York, 386-395, 1990.
37. **Antzelevitch C**. Electrotonic modulation of conduction and automaticity. *Proceedings of the Royal Academy of Arts and Sciences of The Netherlands*, 93:365-382, 1990.
38. **Antzelevitch C**, Wulff VJ, Jalife J. Moe GK. Twenty five years as director of research of the Masonic Medical Research Laboratory. *J Cardiovasc Electrophysiol*, 1:367-376, 1990.

39. Litovsky SH, **Antzelevitch C**. Differences in the electrophysiologic response of canine ventricular subendocardium and subepicardium to acetylcholine and isoproterenol. A direct effect of acetylcholine in ventricular myocardium. *Circ Res*, 67:615-627, 1990.
40. **Antzelevitch C**. Electrotonus and reflection. *In: Cardiac Electrophysiology: A Textbook*. Rosen MR, Janse MJ, Wit AL, eds. Futura Publishing Company, Inc. Mount Kisco, NY, 491-516, 1990.
41. Swenne CA, **Antzelevitch C**. The characteristics of modulated parasystole under conditions of constant and variable heart rate. A mathematical model. *J Cardiovasc Electrophysiol*, 2:34-44, 1991.
42. Sicouri S, **Antzelevitch C**. A subpopulation of cells with unique electrophysiologic properties in the deep subepicardium of the canine ventricle. The M cell. *Circ Res*, 68:1729-1741, 1991.
43. **Antzelevitch C**, Lukas A. Reflection and reentry in isolated ventricular tissue. *In: Basic and Clinical Electrophysiology of the Heart*, Dangman KH, Miura DS, eds. Marcel Dekker, New York, 251-275, 1991.
44. Krishnan SC, **Antzelevitch C**. Sodium channel block produces opposite electrophysiological effects in canine ventricular epicardium and endocardium. *Circ Res*, 69:277-291, 1991.
45. Sicouri S, **Antzelevitch C**. Afterdepolarizations and triggered activity develop in a select population of cells (M Cells) in canine ventricular epicardium. The effects of acetylstrophanthidin and Bay K 8644. *Pacing Clin Electrophysiol*, 14:1714-1720, 1991.
46. **Antzelevitch C**, Sicouri S, Litovsky SH, Lukas A, Krishnan SC, Di Diego JM, Gintant GA, Liu DW. Heterogeneity within the ventricular wall. Electrophysiology and pharmacology of epicardial, endocardial and M cells. *Circ Res*, 69:1427-1449, 1991.
47. **Antzelevitch C**, Di Diego J. Role of K⁺ channel activators in cardiac electrophysiology and arrhythmias. *Circulation*, 85:1627-1629, 1992.
48. Nesterenko V, **Antzelevitch C**. Mathematical simulations of the electrocardiographic U wave. The role of M cells and resistive barriers. *IEEE Computer Society Press*, Los Alamitos, 43-46, 1992.
49. Ofosu-Appiah W, Ruggiero C, Dzielak D, **Antzelevitch C**. The effects of PEG-interleukin-2 and interleukin-2 on essential hypertension and cellular immune function in the spontaneously hypertensive rat. *Clin Exper Hypertens*, 15:435-457, 1993.
50. Sicouri S, **Antzelevitch C**. Drug-induced afterdepolarizations and triggered activity occur in a discrete subpopulation of ventricular muscle cells in the canine heart. Quinidine and digitalis. *J Cardiovasc Electrophysiol*, 4:48-58, 1993.

51. Krishnan SC, **Antzelevitch C**. Flecainide-induced arrhythmias in canine ventricular epicardium. Phase 2 reentry? *Circulation*, 87:562-572, 1993.
52. Liu DW, Gintant G, **Antzelevitch C**. Ionic bases for electrophysiologic distinctions among epicardial, midmyocardial and endocardial myocytes from the free wall of the canine left ventricle. *Circ Res*, 72:671-687, 1993.
53. Di Diego JM, **Antzelevitch C**. Pinacidil produces different electrophysiological effects in canine ventricular epicardium and endocardium and readily induces arrhythmic activity in isolated epicardial sheets. *Circulation*, 88:1177-1189, 1993.
54. Zipes DP, **Antzelevitch C**. The role of early afterdepolarizations in clinical arrhythmias: erythromycin, terfenadine, etc. *NASPETAPES*, 2:2, 1993.
55. Lukas A, **Antzelevitch C**. Selective depression of electrophysiological responses in canine ventricular epicardium versus endocardium during simulated ischemia: role of the transient outward current. *Circulation*, 88:2903-2915, 1993.
56. **Antzelevitch C**, Sicouri S. Clinical relevance of cardiac arrhythmias generated by afterdepolarizations. The role of M cells in the generation of U waves, triggered activity and torsade de pointes. *J Am Coll Cardiol*, 23:259-277, 1994.
57. Roden D, **Antzelevitch C**. Mechanisms of action of antiarrhythmic drugs. What do we know? *NASPETAPES* 3:1, March 1994.
58. Di Diego JM, **Antzelevitch C**. High Ca^{2+} -induced electrical heterogeneity and ectopic activity in isolated canine ventricular epicardium. *Circulation*, 89:1839-1859, 1994.
59. Roden D, **Antzelevitch C**. Clinical relevance of ion channel studies. *NASPETAPES* 3:3, November, 1994.
60. Sicouri S, Fish J, **Antzelevitch C**. Distribution of M cells in the canine ventricle. *J Cardiovasc Electrophysiol*, 5:824-837, 1994.
61. **Antzelevitch C**, Sicouri S, Lukas A, Nesterenko VV, Liu D-W, Di Diego JM. Regional differences in the electrophysiology of ventricular cells. Physiological and clinical implications. *In: Cardiac Electrophysiology: From Cell to Bedside, 2nd ed.* Zipes DP, Jalife J, eds. W.B. Saunders Co., Philadelphia, 228-245, 1995.
62. **Antzelevitch C**, Sicouri S, Lukas A, Di Diego JM, Nesterenko VV, Liu DW, Roubache JF, Zygmunt AC, Zhang ZQ, Iodice A. Clinical implications of heterogeneity in the heart. The electrophysiology and pharmacology of epicardial, M and endocardial cells. *In: Cardiac Arrhythmia: Mechanism, Diagnosis and Management.* Podrid PJ, Kowey PR, eds. William Wilkins, Baltimore, 88-107, 1995.
63. Liu DW, **Antzelevitch C**. Characteristics of the delayed rectifier current (I_{Kr} and I_{Ks}) in canine ventricular epicardial, midmyocardial and endocardial myocytes. *Circ Res*, 76:351-365, 1995.

64. **Antzelevitch C**, Di Diego, JM, Sicouri S, Lukas A. Selective pharmacological modification of repolarizing currents. Antiarrhythmic and proarrhythmic actions of agents that influence repolarization in the heart. Proceedings of the International Workshop on Antiarrhythmic Drugs. Mechanisms of antiarrhythmic and proarrhythmic actions. Breithardt G, Ed. Springer-Verlag, New York, 57-80, 1995.
65. Sicouri S, **Antzelevitch C**. Les Cellules M et l'heterogeneite physiologique de myocarde. *Cardinale*, 7:12-22, 1995.
66. Sicouri S, **Antzelevitch C**. Electrophysiologic characteristics of M cells in the canine left ventricular free wall. *J Cardiovasc Electrophysiol*, 6:591-603, 1995.
67. **Antzelevitch C**. Repolarizing currents in canine ventricular myocardium. Regional differences and similarities. *In: Potassium Channels in Normal and Pathological Conditions. In honor of Professor Edward Carmeliet.* Vereecke J, Verdonck F, van Bogaert PP, eds. Leuven University Press, Leuven, 256-259, 1995.
68. Lukas A, **Antzelevitch C**. The contribution of K⁺ currents to electrical heterogeneity across the canine ventricular wall under normal and ischemic conditions. *In: Pathophysiology of Heart Failure*, Dhalla NS, Pierce GN, Panagia V, eds. Academic Publishers, Boston, 439-456, 1996.
69. **Antzelevitch C**, Nesterenko VV, Yan GX. The role of M cells in acquired LQTS, U waves and torsade de pointes. Invited. *J Electrocardiol*, 28(Supp):131-138, 1996.
70. Yan GX, **Antzelevitch C**. Cellular basis for the electrocardiographic J wave. *Circulation*, 93:372-379, 1996.
71. Sicouri S, Quist M, **Antzelevitch C**. Evidence for the presence of M cells in the guinea pig ventricle. *J Cardiovasc Electrophysiol*, 7:503-511, 1996.
72. Di Diego JM, **Antzelevitch C**. I_{to} outward current and action potential notch are smaller in left vs. right canine ventricular epicardium. *Am J Physiol*, 271:H548-H561, 1996.
73. Lukas A, **Antzelevitch C**. Phase 2 reentry as a mechanism of initiation of circus movement reentry in canine epicardium exposed to simulated ischemia. The antiarrhythmic effect of 4-aminopyridine. *Cardiovasc Res*, 32: 593-603, 1996.
74. **Antzelevitch C**, Sun ZQ, Zhang ZQ, Yan GX. Cellular and ionic mechanisms underlying erythromycin -induced long QT and torsade de pointes. *J Am Coll Cardiol* 28:1836-1848, 1996.
75. **Antzelevitch C**, Zipes DP. What causes the U wave. *NASPETAPES*, 5(2), 1996.
76. Roden DM, Lazzara R, Rosen MR, Schwartz PJ, Towbin JA, Vincent GM, **Antzelevitch C**, Brown AM, Colatsky TJ, Crampton RS, Kass RS, Moss AJ, Sanguinetti MC, Zipes, DP. Mechanisms in the long QT syndrome: current knowledge, gaps, and future

- directions. The SADS Foundation Task Force on LQTS. *Circulation*, 94:1996-2012, 1996.
77. **Antzelevitch C**, Nesterenko VV, Yan GX. Ionic processes underlying the action potential. (Invited). *In: Electrophysiology '96, from the cell to the body surface : proceedings of the XXIIIrd International Congress on Electrophysiology*, Lieberman J, ed. World Scientific, Singapore, 219-228, 1997.
 78. Allesie M, **Antzelevitch C**. Electrophysiological remodeling in atrial fibrillation. *NASPETAPES*, 5(3), 1997.
 79. Zygmunt AC, Goodrow R, **Antzelevitch C**. Sodium effects on voltage-dependent transient outward current in canine ventricular cells. *Am J Physiol*, 272:H1-H11, 1997.
 80. **Antzelevitch C**. The M cell. *J Cardiovasc Pharmacol Ther*, 2:73-76, 1997.
 81. **Antzelevitch C**, Nesterenko VV, Shimizu W, Di Diego J. Electrophysiological characteristics of the M cell. *In: Monophasic Action Potentials*. Franz MR, Schmitt C, Zenner B, eds. Springer, New York, 212-226, 1997.
 82. Shimizu W, Sicouri S, **Antzelevitch C**. Electrophysiological characteristics and clinical significance of the M cell. *In: Medical Topic series Arrhythmia'97*. Sugimoto E, Inoue H, eds. Medical Review Co. Ltd., 1997.
 83. **Antzelevitch C**. Are M cells present in the ventricular myocardium of the pig? A question of maturity. *Cardiovasc Res*, 36:127-128, 1997.
 84. Shimizu W, **Antzelevitch C**. Sodium channel block with mexiletine is effective in reducing dispersion of repolarization and preventing torsade de pointes in LQT2 as well as LQT3 models of the long QT syndrome. *Circulation*, 96:2038-2047, 1997. **NASPE Young Investigator Award – First Prize**.
 85. Sicouri S, Antzelevitch D, Heilmann C, **Antzelevitch C**. Effects of sodium channel block with mexiletine to reverse action potential prolongation in *in vitro* models of the long QT syndrome. *J Cardiovasc Electrophysiol*, 8:1280-1290, 1997.
 86. Sicouri S, Moro S, Litovsky S, Elizari MV, **Antzelevitch C**. Chronic amiodarone reduces transmural dispersion of repolarization in the canine heart. *J Cardiovasc Electrophysiol*, 8:1269-1279, 1997.
 87. **Antzelevitch C**, Shimizu W, Yan GX, Sicouri S. Cellular basis for QT dispersion. *J Electrocardiol*, 30(Suppl):168-175, 1998.
 88. Chen Q, Kirsch GE, Zhang D, Brugada R, Brugada J, Brugada P, Potenza D, Moya A, Borggrefe M, Breithardt G, Oritz-Lopez R, Wang Z, **Antzelevitch C**, O'Brien RE, Schultz-Bahr E, Keating MT, Towbin JA, Wang Q. Genetic basis and molecular mechanisms for idiopathic ventricular fibrillation. *Nature*, 392:293-296, 1998.

89. Bjerregaard P, Gussak I, **Antzelevitch C**. The enigmatic ECG of the Brugada syndrome. Letter to the editor. *J Cardiovasc Electrophysiol*, 9:109-111, 1998.
90. **Antzelevitch C**. The Brugada syndrome. *J Cardiovasc Electrophysiol*, 9:513-516, 1998.
91. Gold MR, El-Sherif N, Cohen RJ, Rosenbaum DS, Antzelevitch C. New insights into arrhythmogenesis and use of T-wave alternans for risk assessment. Proceedings of Satellite Symposium at the 71st Scientific Sessions of the American Heart Association. Dallas, TX, 1998.
92. Yan GX, **Antzelevitch C**. Cellular basis for the normal T wave and the electrocardiographic manifestations of the long QT syndrome. *Circulation* 98:1928-1936, 1998. *ISCE Young Investigator Award Finalist*
93. Yan GX, Shimizu, W, **Antzelevitch C**. The characteristics and distribution of M cells in arterially perfused canine left ventricular wedge preparations. *Circulation*, 98:1921-1927, 1998. *ISCE Young Investigator Award Finalist*
94. Shimizu W, **Antzelevitch C**. Cellular basis for the ECG features of the LQT1 form of the long QT syndrome. Effects of β -adrenergic agonists, antagonists and sodium channel blockers on transmural dispersion of repolarization and torsade de pointes. *Circulation*, 98:2314-2322, 1998.
95. Burashnikov A, **Antzelevitch, C**. Acceleration-induced action potential prolongation and early afterdepolarizations. *J Cardiovasc Electrophysiol*, 9:934-948, 1998.
96. Shimizu W, McMahon B, **Antzelevitch C**. Sodium pentobarbital reduces transmural dispersion of repolarization and prevents torsade de pointes in models of acquired and congenital long QT syndrome. *J Cardiovasc Electrophysiol*, 10:154-164, 1999.
97. **Antzelevitch C**, Yan GX, Shimizu W, Burashnikov A. Electrical heterogeneity, the ECG, and cardiac arrhythmias. *In: Cardiac Electrophysiology, from Cell to Bedside- 3rd edition*, Zipes DP, Jalife J, eds. W. B. Saunders, New York, 222-238, 1999.
98. Gussak I, **Antzelevitch C**, Bjerregaard P, Towbin JA, Chaitman BR. The Brugada syndrome: clinical, electrophysiological and genetic aspects. *J Am Coll Cardiol* 33:5-15, 1999.
99. Shimizu W, **Antzelevitch C**. Cellular and ionic basis for T Wave alternans in the long QT syndrome. *Circulation*, 99:1499-1507, 1999.
100. Burashnikov A, **Antzelevitch C**. Differences in response of four canine ventricular cell types to $\alpha 1$ adrenergic agonists. *Cardiovasc Res*, 43:901-908, 1999.
101. Sicouri S, **Antzelevitch C**, Moro S, Celestino D. Las subpoblaciones de células miocárdicas ventriculares. *In: Importancia fisiológica y fisiopatológica de las células*. Elizari MV, Chiale PA, Propulsora Literaria col., eds, Propulsora Literaria SRL, Buenos Aires, 83-99, 1999.

102. Yan GX, **Antzelevitch C**. Cellular basis for the Brugada syndrome and other mechanisms of arrhythmogenesis associated with ST segment elevation. *Circulation* 100:1660-1666, 1999.
103. Thomas GP, Karmazyn M, Zygmunt AC, **Antzelevitch C**, Narayanan N. The antifungal antibiotic clotrimazol potently inhibits L-type calcium current in guinea pig ventricular myocytes. *Br J Pharmacol*, 126:1531-1533, 1999.
104. **Antzelevitch C**. Ion channels and ventricular arrhythmias. Cellular and ionic mechanisms underlying the Brugada syndrome. *Curr Opin Cardiol*, 14:274-279, 1999.
105. **Antzelevitch C**, Shimizu W, Yan GX, Sicouri S, Weissenburger J, Nesterenko VV, Burashnikov A, Di Diego J, Saffitz J, Thomas GP. The M cell. Its contribution to the ECG and to normal and abnormal electrical function of the heart. Invited Review. *J of Cardiovasc Electrophysiol*, 10:1124-1152, 1999.
106. Tomaselli GR, **Antzelevitch C**. Molecular and ionic basis of arrhythmias in heart failure. *NASPETAPES*, 7:3, 1999.
107. Dumaine R, Towbin JA, Brugada P, Vatta M, Nesterenko D, Nesterenko VV, Brugada J; Brugada R, **Antzelevitch C**. Ionic mechanisms responsible for the electrocardiographic phenotype of the Brugada syndrome are temperature dependent. *Cir Res*, 85:803-809, 1999.
108. **Antzelevitch C**, Roden D. Cellular basis for the influence of the sympathetic nervous system in LQT1, LQT2, LQT3 in the LQTS. *NASPETAPES*, 8:3, 1999.
109. **Antzelevitch C**, Shimizu W, Yan GX, Sicouri S, Weissenburger J, Nesterenko VV, Burashnikov A, Di Diego J, Saffitz J, Thomas GP. (Response to Letter to the Editor) *J Cardiovasc Electrophysiol*, 9:1298-1299, 1999.
110. **Antzelevitch C**, Shimizu W. Torsade de pointes (Response to Letter to Editor). *Circulation*, 100:1462, 1999.
111. Lehmann M, **Antzelevitch C**. Sex related QT interval differences in long QT patients. *NASPETAPES*, 8:1, 1999.
112. Kass RS, **Antzelevitch C**. Molecular biology, structure and function of cardiac ion channels. *NASPETAPES* 8:4, 1999.
113. **Antzelevitch C**, Yan G-X, Shimizu W, Sicouri S, Eddlestone G, Zygmunt A. Electrophysiologic characteristics of M cells and their role in arrhythmias. *In: Monophasic Action Potentials: Bridging Cell and Bedside*. Franz MR, ed. Futura Publishing Co., New York, 583-604, 2000.
114. Shimizu W, **Antzelevitch C**. Differential response to β -adrenergic agonists and antagonists in LQT1, LQT2 and LQT3 models of the long QT syndrome. *J Am Col Cardiol*, 35:778-786, 2000.

115. Shimizu W, Ohe T, **Antzelevitch C**. Early afterdepolarizations and polymorphic ventricular arrhythmias in acquired and congenital long QT syndrome: Observations from clinical and experimental studies. *In: Monophasic Action Potentials. Bridging Cell and Bedside*. Franz MR, ed. Futura Publishing Co., New York, 641-658, 2000.
116. **Antzelevitch C**, Spach M. Impulse conduction: continuous and discontinuous. Foundations of Cardiac Arrhythmias. *In: Basic Concepts: Fundamental Approaches*. Spooner P, Rosen MR, eds. Marcel Dekker, Inc., New York, 205-241, 2000.
117. Brugada R, Brugada J, **Antzelevitch C**, Kirsch GE, Potenza D, Towbin JA, Brugada P. Sodium channel blockers identify risk for sudden death in patients with ST-segment elevation and right bundle branch block but structurally normal hearts. *Circulation*, 101:510-515, 2000.
118. Weissenburger J, Nesterenko VV, **Antzelevitch C**. Transmural heterogeneity of ventricular repolarization under baseline and long QT conditions in the canine heart *in vivo*. Torsade de Pointes develops with halothane but not pentobarbital anesthesia. *J Cardiovasc Electrophysiol*, 11:290-304, 2000.
119. **Antzelevitch C**, Yan GX, Shimizu W. (invited) Transmural dispersion of repolarization and arrhythmogenicity. The Brugada syndrome vs. the long QT syndrome. *J Electrocardiol*, 32:158-165, 2000.
120. **Antzelevitch C**, Shimizu W, Yan G-X. Electrical heterogeneity and the development of arrhythmias. *In: Dispersion of Ventricular Repolarization*. Olsson SB, ed. Futura, New York, 3-21, 2000.
121. Zygmunt C, Goodrow RJ, **Antzelevitch C**. I_{Na-Ca} contributes to electrical heterogeneity within the canine ventricle. *Am J Physiol*, 278:H1671-H1678, 2000.
122. Burashnikov A, **Antzelevitch C**. Block of I_{Ks} does not induce early afterdepolarization activity but promotes β -adrenergic agonist-induced delayed afterdepolarization activity in canine ventricular myocardium. *J Cardiovasc Electrophysiol* 11:458-465, 2000.
123. Towbin JA, Vatta M, Nademanee K, Brugada R, Brugada J, **Antzelevitch C**, Brugada P. Brugada syndrome genetics. *In: Molecular Genetics of Cardiac Electrophysiology*, Berul CI, Towbin JA, eds. Kluwer Academic Publishers, Boston, MA, 147-180, 2000.
124. Shimizu W, Shiro Kumakura, **Antzelevitch C**. Cellular and ionic basis for T wave alternans in the long QT syndrome. *Shinzo (Heart)* 32:319-329, 2000.
125. Shimizu W, Yan GX, Shiro Kumakura, **Antzelevitch C**. Clinical characteristics and cellular basis for the Brugada syndrome. *Shinzo (Heart)* 32:391-403, 2000.
126. **Antzelevitch C**. Regional differences in electrophysiology of ventricular cells: clinical implications for sudden cardiac death. *In: Fighting Sudden Cardiac Death: A worldwide Challenge*, Aliot E, Clementy J, eds. Futura, Armonk, New York, 109-130, 2000.

127. Brugada P, Brugada J, Brugada R, Towbin J, **Antzelevitch C**. Brugada syndrome: from genetics to clinical management. *In: Fighting Sudden Cardiac Death: A Worldwide Challenge*, Aliot E Clementy J, eds. Futura, Armonk, New York, 323-332, 2000.
128. Shimizu W, **Antzelevitch C**, Suyama K, Kurita T, Taguchi A, Aihara N, Takaki H, Sunagawa K, Kamakura S. Effect of sodium channel Blockers on ST segment, QRS duration and corrected QT interval in patients with Brugada syndrome. *J Cardiovasc Electrophysiol*, 12:1320-1329, 2000.
129. **Antzelevitch C**, Yan GX. Cellular and ionic mechanisms responsible for the Brugada syndrome. *J Electrocardiol*, 33:33-39, 2000.
130. **Antzelevitch C**, Burashnikov A. Cardiac arrhythmias: reentry and triggered activity. *In: Heart Physiology and Pathophysiology*, Fourth edition. Sperelakis N, Kurachi Y, Terzic A, and Cohen M, eds. Academic Press, San Diego, CA, 1153-1179, 2000.
131. Schwartz PJ, Priori SG, Dumaine R, Napolitano C, **Antzelevitch C**, Stramba-Badiale M, Richard TA, Berti MR, Bloise R. Sudden infant death syndrome and long QT syndrome: the molecular link. *N Engl J Med*, 343:262-267, 2000.
132. Haverkamp W, Breithardt G, Camm AJ, Janse MJ, Rosen RR, **Antzelevitch C**, Escande D, Franz M, Malik M, Moss A, Shah R. The potential for QT prolongation and proarrhythmia by non-antiarrhythmic drugs: clinical and regulatory implications. Report on a policy conference of the European Society of Cardiology. *Eur Heart J*, 21:1216-1221, 2000.
133. Gussak I, **Antzelevitch C**. Early repolarization syndrome: clinical characteristics and possible cellular and ionic mechanisms. *J Electrocardiol*, 33:299-309, 2000.
134. Haverkamp W, Breithardt G, Camm AJ, Janse MJ, Rosen RR, **Antzelevitch C**, Escande D, Franz M, Malik M, Moss A, Shah R. The potential for QT prolongation and proarrhythmia by non-antiarrhythmic drugs. clinical and regulatory implications. report on a policy conference of the European Society of Cardiology. *Cardiovasc Res*, 47:219-233, 2000.
135. Shimizu W, **Antzelevitch C**. Effects of a K⁺ channel opener to reduce transmural dispersion of repolarization and prevent torsade de pointes in LQT1, LQT2, and LQT3 models of the long QT syndrome. *Circulation*, 102:760-712, 2000.
136. Nesterenko V, Weissenburger J, **Antzelevitch C**. Cellular basis and method for recording the monophasic action potential. Response to Letters to the Editor. *J Cardiovasc Electrophysiol*, 11:946-951, 2000.
137. **Antzelevitch C**. Electrical heterogeneity, cardiac arrhythmias and the sodium channel. Invited Editorial. *Circ Res*, 87:964-965, 2000.

138. Zygmunt AC, Eddlestone GT, Thomas GP, Nesterenko VV, **Antzelevitch C**. Larger late sodium conductance in M cells contributes to electrical heterogeneity in canine ventricle. *Am J Physiol Heart Circ Physiol*, 281:H689-H697, 2001.
139. **Antzelevitch C**. Basic mechanisms of reentrant arrhythmias. *Curr Opin Cardiol*, 16:1-7, 2001.
140. **Antzelevitch C**, Muzikant AL, Rice JJ, Chen G, Nesterenko VV, Colatsky T. Influence of transmural repolarization gradients on the electrophysiology and pharmacology of ventricular myocardium: cellular basis for the Brugada and long QT syndromes. *Philos Trans R Soc Lond B Biol Sci*, 359:1201-1216, 2001.
141. **Antzelevitch C**. The Brugada syndrome. Diagnostic criteria and cellular mechanisms. *Eur Heart J*, 22:356-363, 2001.
142. **Antzelevitch C**. Heterogeneity of cellular repolarization in LQTS. The role of M Cells. *Eur Heart J Suppl*, 3:K-2-K16, 2001.
143. Naccarelli GV, **Antzelevitch C**. The Brugada syndrome: clinical, genetic, cellular and molecular abnormalities. *Am J Med*, 110:573-581, 2001.
144. Sun ZQ, Thomas GP, **Antzelevitch C**. Chromanol 293 blocks slowly activating delayed rectifier and transient outward currents in canine left ventricular myocytes. *J Cardiovasc Electrophysiol*, 12:472-478, 2001.
145. Sun ZQ, Thomas G, **Antzelevitch C**. Role of the delayed rectifier component IKs in cardiac repolarization. (Letter to the editor) *J Cardiovasc Electrophysiol*, 10:1204-1205, 2001.
146. **Antzelevitch C**, Dumaine R. Electrical heterogeneity in the heart: Physiological, pharmacological and clinical implications. *In: Handbook of Physiology. The Heart*. Page E, Fozzard H, Solaro RJ, eds. Oxford University Press, New York, 654-692, 2002.
147. **Antzelevitch C**, Burashnikov A. Mechanisms of arrhythmogenesis. *In: Cardiac Arrhythmias: Mechanism, Diagnostics and Management*. Podrid PJ, Kowey PR, eds. Williams & Wilkins, Baltimore, MD, 51-79, 2001.
148. **Antzelevitch C**. Molecular basis for the transmural distribution of the transient outward current. *J Physiol*, 533:1, 2001.
149. **Antzelevitch C**. Transmural dispersion of repolarization and the T wave. *Cardiovasc Res*, 50:426-431, 2001.
150. **Antzelevitch C**. The Brugada syndrome: ionic basis and arrhythmia mechanisms. *J Cardiovasc Electrophysiol*, 12:268-272, 2001.
151. **Antzelevitch C**. Tpeak-Tend interval as an index of transmural dispersion of repolarization. *Eur J Clin Invest*, 31:555-557, 2001.

152. Franco D, Demolobe S, Kupersmidt S, Dumaine R, Dominguez JN, Roden D, Escande D, **Antzelevitch C**, Moorman AFM. Divergent expression domains of K⁺ channels subunits during mouse heart development. *Cardiovasc Res*, 52:65-75, 2001.
153. Shimizu W, **Antzelevitch C**. Cellular electrophysiology of the congenital long QT syndrome. *J Jpn Ped Cardiol*, 17:2-7, 2001.
154. Shimizu W, **Antzelevitch C**. Cellular basis for the T wave. The role of M cells. *Jpn J Electrocardiol*, 21:101-108, 2001.
155. **Antzelevitch C**, Fish J. Electrical heterogeneity within the ventricular wall. *Basic Res Cardiol*, 96:517-527, 2001.
156. Sicilian Gambit. New approaches to antiarrhythmic therapy, part II: emerging therapeutic applications of the cell biology of cardiac arrhythmias. *Circulation*, 104:2990-2994, 2001.
157. Members of the Sicilian Gambit. New approaches to antiarrhythmic therapy: emerging therapeutic application of the cell biology of cardiac arrhythmias. *Eur Heart J*, 22: 2148-2163, 2001.
158. Members of the Sicilian Gambit. New approaches to antiarrhythmic therapy: emerging therapeutic applications of the cell biology of cardiac arrhythmias. *Cardiovasc Res*, 52:345-360, 2001.
159. **Antzelevitch C**. Transmural dispersion of ventricular repolarization as the basis the Brugada and long QT syndromes in infants and children. *J Electrocardiol*, 34 Suppl: 177-181, 2001.
160. **Antzelevitch C**, Zygmunt AC. Experimental models to assess the role of heterogeneous repolarization in arrhythmogenesis. *In: Myocardial Repolarization. From Gene to Bedside*. Otto A, Breithardt G, eds. Futura Publishing Co., Armonk, NY, pp. 89-116, 2002.
161. Gussak I, Brugada P, Brugada J, **Antzelevitch C**, Osbakken M, Bjrregaard P. ECG phenomena of idiopathic and paradoxical short QT intervals. *Cardiac Electrophysiol Rev*, 6:49-53, 2002.
162. Brugada J, Brugada R, **Antzelevitch C**, Towbin J, Nademanee K, Brugada P. Long-term follow-up of individuals with the electrocardiographic pattern of right bundle-branch block and ST-segment elevation in precordial leads V1 to V3. *Circulation*, 105:73-78, 2002.
163. Link MS, **Antzelevitch C**, Waldo AL, Grant AO, DiMarco JP, Josephson ME, Marchlinski FE, Garan H, Sager PT, Reynolds D, Denes P, Scheinman MM, Estes III NA. Clinical electrophysiology fellowship teaching objectives for the new millennium. *J Cardiovasc Electrophysiol*, 12:1433-1443, 2001.

164. Emori T, **Antzelevitch C**. Cellular basis for complex T waves and arrhythmic activity following combined I_{K_r} and I_{K_s} Block. *J Cardiovasc Electrophysiol*, 12:1369-1378, 2001.
165. Nacarelli G, Wolbutt, D, **Antzelevitch C**, Luck, JC. The Brugada syndrome. *Curr Opin Cardiol*, 17:19-23, 2002.
166. Dumaine R, **Antzelevitch C**. Molecular mechanisms underlying long QT syndrome. *Curr Opin Cardiol*, 17:36-42, 2002.
167. **Antzelevitch C**, Shimizu W. Cellular mechanisms underlying long QT syndrome. *Curr Opin Cardiol*, 17:43-51, 2002.
168. Vatta M, Dumaine R, Richard T, Shimizu W, Aihara N, Nademanee K, Brugada R, Brugada J, Veerakul G, Li H, Bowles NE, Brugada P, **Antzelevitch C**, Towbin JA. Genetic and biophysical basis of sudden unexplained nocturnal death syndrome (SUNDS), a disease allelic to Brugada syndrome. *Hum Mol Genet*, 11:337-345, 2002.
169. Vatta M, Dumaine R, **Antzelevitch C**, Brugada R, Li H, Bowles NE, Nademanee K, Brugada J, Brugada P, Towbin JA. Novel mutations in domain I of SCN5A cause Brugada syndrome. *Mol Genet Metab*, 75:317-324, 2002.
170. Akar FG, Yan GX, **Antzelevitch C**, Rosenbaum DS. Unique topographical distribution of M-cells underlies reentrant mechanism of torsade de pointes in the long QT syndrome. *Circulation*, 105:1247-53, 2002.
171. **Antzelevitch C**. Cellular basis for J, T and U waves of the ECG. *In: New Developments in Cardiac Pacing and Electrophysiology*,. Ovsyshcher IE, ed. Futura, Armonk, NY, pp. 1-8, 2002.
172. **Antzelevitch C**. Brugada syndrome. Historical perspectives and observations. *Eur Heart J*, 23:676-678, 2002.
173. Burashnikov A, **Antzelevitch C**. Prominent I_{K_s} in epicardium and endocardium contributes to development of transmural dispersion of repolarization but protects against development of early afterdepolarizations. *J Cardiovasc Electrophysiol*, 13:172-177, 2002.
174. Wilde AAM, **Antzelevitch C**, Borggrefe M, Brugada J, Brugada R, Brugada P, Corrado D, Hauer RNW, Kass RS, Nademanee K, Priori SG, Towbin JA; Study Group on the Molecular Basis of Arrhythmias of the European Society of Cardiology. Proposed diagnostic criteria for the Brugada syndrome: consensus report. *Circulation*, 106:2514-2519, 2002.
175. Wilde AAM, **Antzelevitch C**, Borggrefe M, Brugada J, Brugada R, Brugada P, Corrado D, Hauer RNW, Kass RS, Nademanee K, Priori SG, Towbin JA; Study Group on the Molecular Basis of Arrhythmias of the European Society of Cardiology. Proposed diagnostic criteria for the Brugada syndrome. *Eur Heart J*, 23:1648-1654, 2002.

176. **Antzelevitch C.** M cells. An historical overview. Einthoven 2002. 100 Years of Electrocardiology. Schalij M, Janse MJ, van Oosterom A, Wellens HJJ, Van der Wall EE, eds. The Einthoven Foundation, Leiden, The Netherlands, 295-302, 2003.
177. **Antzelevitch C.** Sympathetic modulation of the long QT syndrome. *Eur Heart J*, 23:1246-1252, 2002.
178. **Antzelevitch C.** Late potentials and the Brugada syndrome. *J Am Coll Cardiol*, 39:1996-1999, 2002.
179. Belhassen B, Viskin S, **Antzelevitch C.** The Brugada syndrome: is ICD the only therapeutic option? *Pacing Clin Electrophysiol*, 25:1634-1640, 2002.
180. **Antzelevitch C,** Brugada R. Fever and the Brugada syndrome. *Pacing Clin Electrophysiol*, 25:1537-1539, 2002.
181. Di Diego JM, Cordeiro JM, Goodrow RJ, Fish JM, Zygmunt AC, Pérez GJ, Scornik FS, **Antzelevitch C.** Ionic and cellular basis for the predominance of the Brugada syndrome phenotype in males. *Circulation*, 106:2004-2011, 2002.
182. **Antzelevitch C.** Electrical heterogeneity in the heart. *Int J Biol Electromag*, 4:23-26, 2002.
183. **Antzelevitch C.** Molecular basis for the transmural distribution of the transient outward current. *J Physiol (London)*. Reviews and Perspectives in Physiology in 2002, 119R, 2002.
184. **Antzelevitch C.** Cellular and ionic mechanisms underlying the Brugada syndrome. Virtual symposium on the Brugada syndrome. <http://www.brugada-symposium.org> , November, 2002.
185. **Antzelevitch C,** Brugada P, Brugada J, Brugada R, Gussak I, Perez Riera AC. Brugada syndrome. A decade of progress. *Circ Res*, 91:1114-1119, 2002.
186. **Antzelevitch C.** Mechanisms of Cardiac Arrhythmia. *In: Cardiac Arrhythmias.* Elizari MV, Chiale PA, eds. Buenos Aires, Editorial Medica Panamerica, Buenos Aires, Argentina, 81-112, 2003.
187. **Antzelevitch C,** Zygmunt AC, Dumaine R. Electrophysiology and pharmacology of ventricular repolarization. *In: Cardiac Repolarization. Bridging Basic and Clinical Science,* Gussak I, Antzelevitch C, eds. Humana Press, NY, pp. 63-90, 2003.
188. **Antzelevitch C,** Zygmunt AC, Fish J, Perez G, Scornik F. How do we measure repolarization inside the heart?. *In: Cardiac Repolarization. Bridging Basic and Clinical Science,* Gussak I and Antzelevitch C, eds. Humana Press, NY, pp. 91-110, 2003.
189. **Antzelevitch C,** Nesterenko VV. Contribution of electrical heterogeneity of repolarization to the ECG. *In: Cardiac Repolarization. Bridging Basic and Clinical Science,* Gussak I and Antzelevitch C, eds. Humana Press, NY, pp. 111-126, 2003.

190. **Antzelevitch C**, Burashnikov S, Di Diego J. Cellular and ionic mechanisms underlying arrhythmogenesis. *In: Cardiac Repolarization. Bridging Basic and Clinical Science*, Gussak I, Antzelevitch C, eds. Humana Press, NY, pp. 201-251, 2003.
191. Medina-Ravell VA, Lankipalli RS, Yan G-X, **Antzelevitch C**, Medina-Malpica NA, Medina-Malpica OA, Droogan C, Kowey PR. Effect of epicardial or biventricular pacing to prolong QT interval and increase transmural repolarization: does resynchronization therapy pose a risk for patients predisposed to long QT or torsade de pointes? *Circulation*, 107:740-746, 2003.
192. Thomas G, Gerlach W, **Antzelevitch C**. HMR 1556, a potent selective blocker of the slowly activating delayed rectifier potassium current. *J Cardiovasc Pharmacol*, 41:140-147, 2003.
193. Kondo M, Nesterenko VV, **Antzelevitch C**. Cellular basis for the monophasic action potential. Which electrode is the recording electrode? *Cardiovasc Res*, 63:635-644, 2004.
194. Burashnikov A, **Antzelevitch C**. Re-induction of atrial fibrillation immediately following termination of the arrhythmia is mediated by calcium-overload-induced triggered activity. *Circulation*, 107:2355-2360, 2003.
195. Gussak I, **Antzelevitch C**, Bjerregaard P. ECG phenomena of the early ventricular repolarization: Early repolarization syndrome. *In: Cardiac Repolarization. Bridging Basic and Clinical Science*, Gussak I, Antzelevitch C, eds. Humana Press, New York, pp. 407-426, 2003.
196. Brugada P, Brugada R, **Antzelevitch C**, Nademanee K, Towbin J, Brugada J. The Brugada syndrome. *In: Cardiac Repolarization. Bridging Basic and Clinical Science*, Gussak I and Antzelevitch C, eds, Humana Press, New York, 427-446, 2003.
197. Gussak I, **Antzelevitch C**, Goodman D, Bjerregaard P. Short QT interval: ECG phenomenon and clinical syndrome. *In: Cardiac Repolarization. Bridging Basic and Clinical Science*, Gussak I, Antzelevitch C, eds. Humana Press, New York, 497-506, 2003.
198. **Antzelevitch C**, Brugada P, Brugada J, Brugada R, Towbin J, Nademanee K. Brugada syndrome: 1992-2002: a historical perspective. *J Am Coll Cardiol*, 41:1665-1671, 2003.
199. **Antzelevitch C**, El-Sherif N, Rosenbaum D, Vos M. Cellular mechanisms underlying the long QT syndrome. Letter to the editor. *J Cardiovasc Electrophysiol*, 14:114-115, 2003.
200. Ramakers C, Vos MA, Doevendans PA, Shoenmakers M, Wu YS, Scicchitano S, Iodice A, Thomas GP, **Antzelevitch C**, Dumaine R. Coordinated down regulation of KCNQ1 and KCNE1 expression contributes to reduction of IKs in canine hypertrophied hearts. *Cardiovasc Res*, 57:486-496, 2003.

201. **Antzelevitch C.** Cellular and ionic mechanisms underlying the brugada and long QT syndromes. *In: Proceedings of XIIIth World Congress on Cardiac Pacing and Electrophysiology*, Lau CH, Tse HF, eds. Moduzzi Editore, Hong Kong, 497-506, 2003.
202. **Antzelevitch C.** Androgens and male predominance of the Brugada syndrome phenotype. *Pacing Clin Electrophysiol*, 26:1429-1431, 2003.
203. **Antzelevitch C, Brugada R.** Electrocardiographic curiosities. Expert's opinion. *J Electrocardiol*, 36:165, 2003.
204. **Antzelevitch C.** Clinical, genetic, molecular and cellular aspects of the Brugada syndrome. A Paradigm for understanding the role of spatial dispersion of repolarization in arrhythmogenesis. *Int J Bioelectromagnetism*, 5:134-138, 2003.
205. Kondo M, **Antzelevitch C**, Tsutsumi T, Takeyama Y, Harumi K. Contribution of conduction delay within the right ventricular outflow tract or bundle branch to arrhythmogenesis in Brugada syndrome. A 3-D computer simulation study. *Int J Bioelectromagnetism*, 5:267, 2003.
206. Francis J, **Antzelevitch C.** Brugada-like electrocardiographic pattern. *Indian Pacing Electrophysiol J*, 3:91-92, 2003.
207. **Antzelevitch C.** Brugada syndrome: clinical genetic, molecular and ionic aspects. *Expert Rev Cardiovasc Ther*, 1:177-185, 2003.
208. Fish JM, **Antzelevitch C.** Ionic and cellular basis for the sex-related difference in the manifestation of the Brugada syndrome and progressive conduction disease phenotypes. *J Electrocardiol*, 36:173-179, 2003.
209. Di Diego JM, **Antzelevitch C.** Cellular basis for ST-segment changes observed during ischemia. *J Electrocardiol*, 36:1-5, 2003.
210. Belardinelli L, **Antzelevitch C**, Vos M. Assessing predictors of drug-induced torsade de pointes. *Trends Pharmacol Sci*, 24:619-25, 2003.
211. Di Diego JM, Belardinelli L, **Antzelevitch, C.** Cisapride-induced transmural dispersion of repolarization and torsade de pointes in the canine left ventricular wedge preparation during epicardial stimulation. *Circulation*, 108:1027-1033, 2003.
212. Yan G-X, Kowey P R, Droogan C, Lankipalli RS, **Antzelevitch C**, Medina-Ravell VA., Medina-Malpica NA, Medina-Malpica OA. Effect of epicardial or biventricular pacing to prolong QT interval and increase transmural dispersion of repolarization. Response to letter to editor. *Circulation*, 108:e27-e28, 2003.
213. Wilde AAM, **Antzelevitch C.** The continuing story: the etiology of Brugada syndrome: functional or structural basis? Response to letter to editor. *Eur Heart J*, 24:2072-2073, 2003.

214. **Antzelevitch C.** Molecular genetics of arrhythmias and cardiovascular conditions associated with arrhythmias. Invited review- NASPE 25th Anniversary. *Pacing Clin Electrocardiol*, 26:2194-2208, 2003.
215. **Antzelevitch C.** Molecular genetics of arrhythmias and cardiovascular conditions associated with arrhythmias. Invited review. NASPE History Series. *J Cardiovasc Electrophysiol*, 14:1259-1272, 2003.
216. Zicha S, Moss I, Varro A, Papp J, Dumaine R, **Antzelevitch C**, Nattel S. Molecular basis of species-specific expression of repolarizing potassium currents in the heart. *Am J Physiol*, 285:H1641-H1649, 2003.
217. **Antzelevitch C.** Drug-induced channelopathies. *In: Cardiac Electrophysiology. From Cell to Bedside.* 4th ed. Zipes DP, Jalife J, eds. W. B. Saunders, New York, NY. pp. 151-157, 2004.
218. Brugada P, Brugada R, **Antzelevitch C**, Towbin J, Brugada J. The Brugada syndrome. *In: Cardiac Electrophysiology. From Cell to Bedside.* 4th ed. Zipes DP, Jalife J, eds. W. B. Saunders, New York, NY pp 625-632, 2004.
219. **Antzelevitch C.** Cellular basis for the repolarization waves of the ECG. *In: Dynamic Electrocardiography.* Malik M, Camm AJ, eds., Futura, New York. pp 291-300, 2004.
220. Wu L, Song Y, Shryock JC, Li Y, **Antzelevitch C**, Belardinelli L. Antiarrhythmic effects of Ranolazine in a guinea pig *in vitro* model of the long QT syndrome. *J Pharmacol Exp Ther*, 310:599-605, 2004.
221. Fish JM, Di Diego JM, Nesterenko VV, **Antzelevitch C.** Epicardial activation of left ventricular wall prolongs QT interval and transmural dispersion of repolarization. implications for biventricular pacing. *Circulation*, 109:2136-2142, 2004.
222. **Antzelevitch C.** Cellular basis and mechanism underlying normal and abnormal myocardial repolarization and arrhythmogenesis. *Ann Med* 36:5-14, 2004.
223. Hong K, Piñero Galvez C, Pongvarin N, Oliva A, Vatta M, Brugada J, Brugada P, Berruezo Sanchez A, Towbin JA, Dumaine R, **Antzelevitch C**, Brugada R. Phenotypic characterization of a large European family with Brugada syndrome displaying a SUDS mutation in SCN5A. *J Cardiovasc Electrophys*, 15:64-69, 2004.
224. Viskin S, Zeltser D, **Antzelevitch C.** When u say “U waves,” what do u mean? *Pacing Clin Electophysiol*, 27:145-147, 2004. PMID1513620
225. Verrier R, **Antzelevitch C.** Autonomic aspects of arrhythmogenesis: the enduring and the new. *Curr Opin Cardiol*, 19:2-11, 2004. PMID1513619
226. Cordeiro JM, Greene L, Heilmann C, Antzelevitch D, **Antzelevitch C.** Transmural heterogeneity of calcium activity and mechanical function in the canine left ventricle. *Am J Physiol Heart Circ Physiol*, 286:H1471-1479, 2004.

227. Fish J, **Antzelevitch C**. Role of sodium and calcium channel block in unmasking the Brugada syndrome. *Heart Rhythm*, 1:210-217, 2004. PMID1524822
228. **Antzelevitch C**, Belardinelli L, Zygmunt AC, Burashnikov A, Di Diego JM, Fish JM, Cordeiro, JM, Thomas, GP. Electrophysiologic effects of ranolazine, a novel anti-anginal agent with antiarrhythmic properties. *Circulation*, 110:904-910, 2004. PMID1513623
229. **Antzelevitch C**, Belardinelli L, Wu L, Fraser H, Zygmunt AC, Burashnikov A, Di Diego JM, Fish JM, Cordeiro JM, Goodrow RJ, Scornik F, Perez G. Electrophysiologic properties of ranolazine: a novel anti-anginal agent. *J Cardiovas Pharmacol Ther*, 9:S65-83, 2004.
230. **Antzelevitch C**. T_{peak}-T_{end} interval as an index of transmural dispersion of repolarization and risk for development of Torsade de Pointes. LQTS virtual symposium, Internet April, 2004.
231. **Antzelevitch C**, Francis J. Congenital short QT syndrome. *Indian Pacing Electrophysiol J*, 4:46-48, 2004.
232. Extramiana F, **Antzelevitch C**. Transmural electrophysiological heterogeneities underlying arrhythmogenesis associated with short QT intervals. *Circulation*, 110:3661-3666, 2004.
233. Brugada R, Hong K, Dumaine R, Cordeiro JM, Gaita F, Borggreffe M, Menendez TM, Brugada J, Pollevick G, Wolpert C, Burashnikov E, Matsuo K, Wu YS, Guerchicoff A, Bianchi F, Giustetto C, Schimpf R, Brugada P, **Antzelevitch C**. Sudden death associated with short-QT syndrome linked to mutations in HERG. *Circulation*, 109: 30-35, 2004.
234. Burashnikov A, Mannava S, **Antzelevitch C**. Transmembrane action potential heterogeneity in the canine isolated arterially-perfused atrium: effect of IKr and Ito/IKur block. *Am J Physiol*, 286:H2393-H2400, 2004.
235. Hong K, Brugada J, Oliva A, Berruzo-Sanchez A, Potenza D, Pollevick GD, Guerchicoff A, Matsuo K, Burashnikov E, Dumaine R, Towbin J, Nesterenko V, Brugada P, **Antzelevitch C**, Brugada R. Phenotypic characterization of a large European family with Brugada syndrome displaying a sudden unexpected death syndrome mutation in SCN5A. *J Cardiovasc Electrophysiol*, 15:64-69, 2004.
236. Fish JM, **Antzelevitch C**. The link between hypothermia and the Brugada syndrome. *J Cardiovasc Electrophysiol*, 15:942-944, 2004. PMID1513621
237. **Antzelevitch C**. The Brugada syndrome. Clinical, molecular, genetic and cellular aspects. *Proceedings of the International Congress of Electrocardiology, Kyoto, Japan, 2004*.
238. Fenichel RR, Malik M, **Antzelevitch C**, Sanguinetti M, Roden DM, Priori SG, Ruskin JN, Lipicky RJ, Cantilena LR. Drug-induced torsades de pointes and implications for drug development. *J Cardiovasc Electrophysiol*, 15:475-495, 2004. PMID1544371

239. Gaita F, Giustetto C, Bianchi F, Schimpf R, Haissaguerre M, Calo L, Brugada R, **Antzelevitch C**, Borggrefe M, Wolpert C. Short QT syndrome: pharmacological treatment. *J Am Coll Cardiol*, 43:1494-1499, 2004.
240. **Antzelevitch C**. Arrhythmogenic mechanisms of QT prolonging drugs: is QT prolongation really the problem? *J Electrocardiol*, 37:15-24, 2004.
241. **Antzelevitch C**, Belardinelli L, Wu L, Fraser H, Zygmunt AC, Burashnikov A, Di Diego JM, Fish JM, Cordeiro JM, Goodrow RJ, Scornik F, Perez G. Electrophysiologic properties of ranolazine: a novel anti-anginal agent. *J Cardiovasc Pharmacol Ther*, 9:S65-S83, 2004.
242. Belardinelli L, **Antzelevitch C**, Fraser H. Inhibition of late sodium current: a potential drug target to reduce intracellular sodium-dependent calcium-overload and its detrimental effect on cardiomyocyte function. *Eur Heart J*, 6:13-17, 2004.
243. Hong K, **Antzelevitch C**, Brugada P, Brugada J, Ohe T, Brugada R. Brugada syndrome: 12 years of progression. *Acta Med Okayama*, 58:255-261, 2004.
244. Hong K, Brugada J, Oliva A, Berruezo-Sanchez A, Potenza D, Pollevick GD, Guerchicoff A, Matsuo K, Burashnikov E, Dumaine R, Towbin JA, Nesterenko V, Brugada P, **Antzelevitch C**, Brugada R. Value of electrocardiographic parameters and ajmaline test in the diagnosis of Brugada syndrome caused by SCN5A mutations. *Circulation*, 110:3023-3027, 2004. PMID1513622
245. **Antzelevitch C**, Brugada P, Borggrefe M, Brugada J, Brugada R, Corrado D, Gussak I, LeMarec H, Nademanee K, Riera ARP, Tan H, Shimizu W, Schultze-Bahr E, Wilde A. Brugada syndrome: overview. *In: The Brugada Syndrome: From Bench to Bedside*. Antzelevitch C, ed. Blackwell Futura, Malden, MA, pp, 1-22, 2005.
246. **Antzelevitch C**, Fish J, DiDiego JM. Cellular mechanisms underlying the Brugada syndrome. *The Brugada Syndrome: From Bench to Bedside. In: The Brugada Syndrome: From Bench to Bedside*. Antzelevitch C, ed. Blackwell Futura, Malden, MA, pp. 52-77, 2005.
247. Corrado D, Pelliccia A, **Antzelevitch C**, Leoni L, Schiavon M, Buja G, Maron B, Thiene G. ST segment elevation and sudden death in the athlete. *In: The Brugada Syndrome: From Bench to Bedside*. Antzelevitch C, ed. Blackwell Futura, Malden, MA, pp. 119-129, 2005.
248. Wolpert C, Echternach C, Veltmann C, **Antzelevitch C**, Thomas GP, Spehl S, Streitner F, Kuschyk J, Schimpf R, Haase KK, Borggrefe M. Intravenous drug challenge using flecainide and ajmaline in patients with Brugada syndrome. *Heart Rhythm*, 2:254-260, 2005. PMID1474213
249. Burashnikov A, **Antzelevitch C**. Role of repolarization restitution in the development of coarse and fine atrial fibrillation in the isolated canine right atria. *J Cardiovasc Electrophysiol*, 16:639-645, 2005. PMID1479890

250. Wolpert C, Schimpf R, Bianchi F, Giustetto C, **Antzelevitch C**, Cordeiro JM, Dumaine R, Goodrow R, Brugada R, Hong K, Hsu LF, Haissaguerre M, Bauersfeld U, Gaita F, Borggrefe M. Further insights into the effect of quinidine in short QT syndrome caused by a mutation in HERG. *J Cardiovasc Electrophysiol*, 16:54-58, 2005. PMID1474841
251. Nesterenko VV, Kondo M, **Antzelevitch C**. What is a monophasic action potential recorded by the “Franz” contact electrode? Reply to letter to editor. *Cardiovasc Res*, 65:942-944, 2005. PMID1538959
252. **Antzelevitch C**, Brugada P, Borggrefe M, Brugada J, Brugada R, Corrado D, Gussak I, LeMarec H, Nademanee K, Riera ARP, Tan H, Shimizu W, Schulze-Bahr E, Wilde A. Brugada syndrome: report of the second consensus conference: endorsed by the Heart Rhythm Society and the European Heart Rhythm Association. *Circulation*, 111:659-670, 2005.
253. **Antzelevitch C**, Brugada P, Borggrefe M, Brugada J, Brugada R, Corrado D, Gussak I, LeMarec H, Nademanee K, Riera ARP, Tan H, Shimizu W, Schulze-Bahr E, Wilde A. Brugada syndrome: report of the second consensus conference. *Heart Rhythm*, 2:429-440, 2005.
254. **Antzelevitch C**, Brugada P, Brugada J, Brugada R. The Brugada syndrome: from cell to bedside. *Curr Prob Cardiol*, 30:9-54, 2005. PMID1475801
255. Brugada P, Brugada R, **Antzelevitch C**, Brugada J. The Brugada syndrome. *Arch Mal Coeur Vaiss*, 98:115-122, 2005.
256. **Antzelevitch C**. Clinical, genetic, molecular and cellular aspects of the Brugada syndrome. *In: Proceedings of the 31st International Congress on Electrocardiology: Advances in Electrocardiology 2004*, Hiraoka M, Ogawa S, Kodama I, Inoue H, Kasanuki H, Katoh T, eds. World Scientific Publishing, Singapore, 203-218, 2005.
257. Francis J, **Antzelevitch C**. Review: Brugada syndrome. *Int J Cardiol*, 101:173-178, 2005. PMID1474051
258. Shimizu W, Aiba T, **Antzelevitch C**. Specific therapy based on the genotype and cellular mechanism in inherited cardiac arrhythmias - long QT syndrome and Brugada syndrome. *Curr Pharm Des*, 11:1561-1572, 2005. PMID1475802
259. Nam G-B, Burashnikov A, **Antzelevitch C**. Cellular mechanisms underlying the development of catecholaminergic ventricular tachycardia. *Circulation*, 111:2727-2733, 2005. PMID1484839
260. **Antzelevitch C**. Modulation of transmural repolarization. *Ann NY Acad Sci*, 1047:314-323, 2005. PMID1474840
261. **Antzelevitch C**. Electrophysiology of the J wave and T wave in health and disease. *Amsterdam Lecture*. 2005.

262. **Antzelevitch C**, Fish JM. Therapy for the Brugada syndrome. *Handb Exp Pharmacol*, 71:305-330, 2005. PMID1474239
263. **Antzelevitch C**. Cardiac repolarization. The long and short of it. *Europace*, 7:3-9, 2005. PMID1473216
264. Fish JM, Brugada J, **Antzelevitch C**. Potential proarrhythmic effects of biventricular pacing. *J Am Coll Cardiol*, 46:2340-2347, 2005. PMID1474835
265. Riera A, **Antzelevitch C**, Schapacknik E, Dubner S, Ferreira C. An invited editorial: Is there an overlap between Brugada syndrome and arrhythmogenic right ventricular cardiomyopathy/dysplasia? *J Electrocardiol*, 38:260-263, 2005. PMID1479891
266. Costantini DL, Arruda EP, Agarwal P, Kim KH, Zhu Y, Zhu W, Lebel M, Cheng CW, Park CY, Pierce SA, Guerchicoff A, Pollevick GD, Chan TY, Kabir MG, Cheng SH, Husain M, **Antzelevitch C**, Srivastava D, Gross GJ, Hui CC, Backx PN, Bruneau BG. The homeodomain transcription factor *Irx5* establishes the mouse cardiac ventricular repolarization gradient. *Cell*, 123:347-358, 2005. PMID1480411
267. **Antzelevitch C**. Editorial commentary: *In vivo* human demonstration of phase 2 reentry. *Heart Rhythm*, 2:804-806, 2005. PMID1474078
268. Burashnikov A, **Antzelevitch C**. Mechanisms underlying the immediate re-induction of atrial fibrillation. Late phase 3 EAD-induced triggered activity and augmented dispersion of repolarization. ISHNE Atrial Fibrillation World Wide Internet Symposium, October, 2005.
269. Viskin S, **Antzelevitch C**. The cardiologists' worst nightmare: sudden death from "benign" ventricular arrhythmias. *J Am Coll Cardiol*, 46:1295-1297, 2005. PMID1475953
270. Di Diego JM, Fish JM, **Antzelevitch C**. Brugada syndrome and ischemia-induced ST segment elevation. Similarities and differences. *J Electrocardiol*, 38(suppl):14-17, 2005. PMID1473215
271. Borggreffe M, Wolpert C, **Antzelevitch C**, Veltmann C, Giustetto C, Gaita F, Schimpf R. Short QT syndrome: genotype-phenotype correlations. *J Electrocardiol*, 38(suppl):75-80, 2005. PMID1471068
272. **Antzelevitch C**. Role of transmural dispersion of repolarization in the genesis of drug-induced torsades de pointes. *Heart Rhythm*, 2(2 suppl):S9-S15, 2005. PMID1479892
273. Viskin S, Rosso R, Rogowski O, Belhassen B, Levitas A, Wagshal A, Katz A, Fourey D, Zeltser D, Oliva A, Pollevick GD, **Antzelevitch C**, Rozovski U. Provocation of sudden heart rate oscillation with adenosine exposes abnormal QT responses in patients with long QT syndrome: a bedside test for diagnosing long QT syndrome. *Eur Heart J*, 27:469-475, 2006. PMID1474076

274. **Antzelevitch C**, Oliva A. Amplification of spatial dispersion of repolarization underlies sudden cardiac death associated with catecholaminergic polymorphic VT, long QT, short QT and Brugada syndromes. *J Intern Med*, 259:48-58, 2006. PMID1474026
275. Tsuboi M, **Antzelevitch C**. Cellular basis for electrocardiographic and arrhythmic manifestations of Andersen-Tawil syndrome (LQT7). *Heart Rhythm*, 3:328-335, 2006. PMID1474110
276. Vernoooy K, Delhaas T, Cremer OL, Di Diego JM, Oliva A, Timmermans C, Volders PG, Prinzen FW, Crijns HJ, **Antzelevitch C**, Kalkman CJ, Rodriguez LM, Brugada R. Electrocardiographic changes predicting sudden death in propofol-related infusion syndrome. *Heart Rhythm*, 3:131-137, 2006. PMID1474111
277. Fish JM, Welchons DR, Kim YS, Lee SH, Ho WK, **Antzelevitch C**. Dimethyl lithospermate B, an extract of danshen, suppresses arrhythmogenesis associated with the Brugada syndrome. *Circulation*, 113:1393-1400, 2006. PMID1475954
278. **Antzelevitch C**, Sicouri S. Mecanismos celulares y moleculares subyacentes de las arritmias cardíacas inducidas por drogas y asociadas inducidas por drogas y asociadas con la prolongación del intervalo QT. *Salud(i)Ciencia*. 14:24-27, 2006. Translation: "Cellular and molecular mechanisms underlying drug-induced cardiac arrhythmias associated with prolongation of the QT interval."
279. Maron BJ, Towbin JA, Thiene G, **Antzelevitch C**, Corrado D, Arnett D, Moss AJ, Seidman CE, Young JB. Contemporary definitions and classification of the cardiomyopathies. *Circulation*, 113:1807-1816, 2006.
280. Burashnikov A, **Antzelevitch C**. Late phase 3 EAD. A unique mechanism contributing to initiation of atrial fibrillation. *Pacing Clin Electrophysiol*, 29:290-295, 2006. PMID1474077
281. Castro Hevia J, **Antzelevitch C**, Tornés Bázquez F, Dorantes Sánchez M, Dorticós Balea F, Zayas Molina R, Quiñones Pérez MA, Fayad Rodríguez Y. Tpeak-tend and Tpeak-tend dispersion as risk factors for ventricular tachycardia/ventricular fibrillation in patients with the Brugada syndrome. *J Am Coll Cardiol*, 47:1828-1834, 2006. PMID1474075
282. **Antzelevitch C**, Belardinelli L. The role of sodium channel current in modulating transmural dispersion of repolarization and arrhythmogenesis. *J Cardiovasc Electrophysiol*, 17(suppl1):S79-85, 2006. PMID1474079
283. **Antzelevitch C**, Sicouri S. Cellular and molecular mechanisms underlying drug-induced cardiac arrhythmias associated with prolongation of the QT interval. *Journals Salud(i)Ciencia, Trabajos Distinguidos, Temas Maestros*, 14:24-27, 2006.
284. Scornik FS, Desai M, Brugada R, Guerchicoff A, Pollevick GD, **Antzelevitch C**, Pérez GJ. Functional expression of the cardiac Na_v1.5 sodium channel in canine intracardiac ganglia. *Heart Rhythm*, 3:842-850, 2006. PMID1989775

285. Liu T, Brown BS, Wu Y, **Antzelevitch C**, Kowey PR, Yan GX. Blinded validation of the isolated arterially perfused rabbit ventricular wedge in preclinical assessment of drug-induced proarrhythmias. *Heart Rhythm*, 3:948-956, 2006. PMID1955432
286. **Antzelevitch C**, Riera ARP, Meneghini A. Basic electrophysiology. *In: Electrocardiology Today*, Mendes M, Grupi CJ, Moffa PJ, Antonio J., Ramires F, eds. pp. 249-260, 2006.
287. Vernoooy K, Sicouri S, Dumaine R, Hong K, Oliva A, Burashnikov E, Timmermans C, Delhaas T, Crijns HJ, **Antzelevitch C**, Rodriguez LM, Brugada R. Genetic and biophysical basis for bupivacaine-induced ST segment elevation and VT/VF. Anesthesia unmasked Brugada syndrome. *Heart Rhythm*, 3:1074-1078, 2006. PMID1993838
288. **Antzelevitch C**. Brugada syndrome. *Pacing Clin Electrophysiol*, 29:1130-1159, 2006. PMID1978482
289. Cordeiro JM, Barajas-Martinez H, Hong K, Burashnikov E, Pfeiffer R, Orsino AM, Wu YS, Hu D, Brugada J, Brugada P, **Antzelevitch C**, Dumaine R, Brugada R. Compound heterozygous mutations P336L and I1660V in the human cardiac sodium channel associated with the Brugada syndrome. *Circulation*, 114:2026-2033, 2006. PMID1989773
290. **Antzelevitch C**. Cellular basis for the repolarization waves of the ECG. *Ann NY Acad Sci*, 1080:268-281, 2006. PMID1952680
291. Dumaine R, **Antzelevitch C**. Disopyramide: although potentially life-threatening in the setting of long QT, could it be life-saving in short QT syndrome? Editorial. *J Mol Cell Cardiol*, 41:421-423, 2006. PMID1989772
292. Corrado D, Bacharova L, **Antzelevitch C**, Kanters JK. How to prevent sudden death in patients with inherited arrhythmia syndromes or cardiomyopathies. *J Electrocardiol*, 40:S62-S65, 2007. PMID2154349
293. **Antzelevitch C**, Wilde A, Eckardt L, Hiraoka M, Corrado D. Diagnostic and genetic aspects of the Brugada and other inherited arrhythmias syndromes. *J Electrocardiol*, 40:S11-S14, 2007. PMID2396514
294. **Antzelevitch C**, Pollevick GD, Cordeiro JM, Casis O, Sanguinetti MC, Aizawa Y, Guerchicoff A, Pfeiffer R, Oliva A, Wollnik B, Gelber P, Bonaros EP Jr, Burashnikov E, Wu YS, Sargent JD, Schickel S, Oberheiden R, Bhatia A, Hsu LF, Haissaguerre M, Schimpf R, Borggrefe M, Wolpert C. Loss of function mutations in the cardiac calcium channel underlie a new clinical entity characterized by ST segment elevation, short QT intervals and sudden cardiac death. *Circulation*, 115:442-449, 2007. PMID1952683
295. Burashnikov A, Di Diego JM, Zygmunt A, Belardinelli L, **Antzelevitch C**. Atrial-selective sodium channel block as a strategy for suppression of atrial fibrillation. *ISHNE Atrial Fibrillation World-Wide Internet Symposium*, 2007.

296. Sicouri S, Timothy KW, Zygmunt AC, Glass A, Goodrow RJ, Belardinelli L, **Antzelevitch C**. Cellular basis for the electrocardiographic and arrhythmic manifestations of Timothy syndrome: the effects of ranolazine. *Heart Rhythm*, 4:638-647, 2007. PMID1951535
297. **Antzelevitch C**. Ionic, molecular and cellular bases of QT interval prolongation and torsade de pointes. *AstraZeneca Journal Supplement "Re-examining the relationship between QT prolongation and TdP"*, 2007.
298. **Antzelevitch C**, Burashnikov A, Di Diego J. Mechanisms of cardiac arrhythmia. *In: Electrical Diseases of the Heart. Genetics, Mechanisms, Treatment, Prevention*. Gussak I, **Antzelevitch C**, eds. Springer, UK, 65-132, 2007.
299. Rituparna S, Suresh S, Purvez G, Makhale CN, Durairaj M, Di Diego JM, **Antzelevitch C**. Occurrence of "J waves" in 12 lead ECG as a marker of acute ischemia and their cellular basis. *Pacing Clin Electrophysiol*, 30:817-819, 2007. PMID1989774
300. **Antzelevitch C**. Genetic basis of Brugada syndrome. *Heart Rhythm*, 4:756-757, 2007. PMID1989771
301. Hu D, Viskin S, Oliva A, Carrier T, Cordeiro JM, Barajas-Martínez H, Wu YS, Burashnikov E, Sicouri S, Brugada R, Rosso R, Guerchicoff A, Pollevick GD, **Antzelevitch C**. Novel mutation in the SCN5A gene associated with arrhythmic storm developing during acute myocardial infarction. *Heart Rhythm*, 4:1072-1080, 2007. PMID1978483
302. **Antzelevitch C**, Sicouri S, Di Diego JM, Burashnikov A, Viskin S, Shimizu W, Yan GX, Kowey P, Zhang L. Does T(peak)-T(end) provide an index of transmural dispersion of repolarization? *Heart Rhythm*, 4:1114-1116, 2007. PMID1994816
303. **Antzelevitch C**. The role of spatial dispersion of repolarization in inherited and acquired sudden cardiac death syndromes. *Am J Physiol Heart Circ Physiol*, 293:H2024-H2038, 2007. PMID2085107
304. Glass A, Serge Sicouri S, **Antzelevitch C**. Development of a coronary-perfused interventricular septal preparation as a model for studying the role of the septum in arrhythmogenesis. *J Electrocardiol*, 40:S142-S144, 2007. PMID2121610
305. **Antzelevitch C**. Tpeak-tend interval as an index of spatial dispersion of repolarization and risk for development of cardiac arrhythmias. *In: Fifth Virtual Congress of Cardiology*, September, 2007 <http://www.fac.org.ar/qcvc/llave/c081i/antzelevi.php>.
306. Burashnikov A, Di Diego JM, Zygmunt AC, Belardinelli L, **Antzelevitch C**. Atrium selective sodium channel block as a strategy for suppression of atrial fibrillation: differences in sodium channel inactivation between atria and ventricles and the role of ranolazine. *Circulation*, 116:1449-1457, 2007. PMID2566303

307. Pellis T, Link M, **Antzelevitch C**, Kohl P. Rare syndromes, commotio cordis, sudden death in athletes. *In: Cardiac Arrest: the Science and Practice of Resuscitation Medicine* Paradis N, Halperin H, Kern K, Wenzel V & Chamberlain D, eds, Cambridge University Press, New York, NY, 1148-1198, 2007.
308. **Antzelevitch C**. Heterogeneity and cardiac arrhythmias: an overview. *Heart Rhythm*. 2007;4:964-972. PMID1950291
309. Viskin S, **Antzelevitch C**, Márquez MF, Belhassen B. Editorial. Quinidine: a valuable medication joins the list of “endangered species”. *Europace*, 9:1105-1106, 2007. PMID17761793
310. **Antzelevitch C**. Ionic, molecular, and cellular bases of QT interval prolongation and torsade de pointes. *Europace*, 9:iv4-iv15, 2007. PMID2365914
311. Aizawa Y, Ueda K, Scornik F, Cordeiro JM, Wu Y, Desai M, Guerchicoff A, Nagata Y, Iesaka Y, Kimura A, Hiraoka M, **Antzelevitch C**. A novel mutation in KCNQ1 associated with a potent dominant negative effect as the basis for the LQT1 form of the long QT syndrome. *J Cardiovasc Electrophysiol*, 18:972-977, 2007. PMID2085492
312. Hu D, Viskin S, Oliva A, Cordeiro JM, Guerchicoff A, Pollevick GD, **Antzelevitch C**. Genetic predisposition and cellular basis for ischemia-induced ST segment changes and arrhythmias. *J Electrocardiol*, 40:S26-S29, 2007. PMID2121617
313. Cordeiro JM, Malone JE, Di Diego JM, Aistrup GL, **Antzelevitch C**, Wasserstrom JA. Cellular and subcellular alternans in the canine left ventricle. *Am J Physiol Heart Circ Physiol*, 293:H3506-H3516, 2007. PMID2366895
314. **Antzelevitch C**. Drug-induced spatial dispersion of repolarization, First worldwide internet symposium on drug-induced QT prolongation. 2007 <http://www.lqts-symposium.org>.
315. Sicouri S, Ferreiro, **Antzelevitch C**. Fisiopatología de las Arritmias. *In: Fisiopatología Cardíaca*, Donato M, Gelpi G, eds, 2008.
316. **Antzelevitch C**, Viskin S. Brugada syndrome: cellular mechanisms and approaches to therapy. *In: Electrical Diseases of the Heart. Genetics, Mechanisms, Treatment, Prevention*. Gussak I, **Antzelevitch C**, eds. Springer, UK, 500-535, 2008.
317. **Antzelevitch C**. Mechanisms of cardiac arrhythmia and conduction disturbances. *In: Hurst's The Heart* 12th Edition. Fuster V, O'Rourke R, Walsh R, Poole-Wilson P, eds. McGraw Hill, New York, pp. 913-945, 2008.
318. **Antzelevitch C**. The role of spatial dispersion of repolarization and intramural reentry in inherited and acquired sudden cardiac death syndromes. *In: Ventricular Arrhythmias and Sudden Cardiac Death: Mechanism, Ablation, and Defibrillation*. Wang P, Hsia HH, Al-Ahmad A, Zei PC, eds, Wiley-Blackwell Publishing, Hoboken, NJ, pp. 1-17, 2008.

319. Schimpf R, **Antzelevitch C**, Haghi D, Giustetto C, Pizzuti A, Gaita F, Veltmann C, Wolpert C, Borggrefe M. Electromechanical coupling in patients with the short QT syndrome: further insights into the mechano-electrical hypothesis of the U wave. *Heart Rhythm*, 5:241-245, 2008. PMID2366900
320. Fish JM, **Antzelevitch C**. Cellular mechanism and arrhythmogenic potential of T wave alternans in the Brugada syndrome. *J Cardiovasc Electrophysiol*, 19:301-308, 2008. PMID2367008
321. Francis J, **Antzelevitch C**. Atrial fibrillation and Brugada syndrome. *J Am Coll Cardiol*, 51:1149-1153, 2008. PMID2367004
322. Sicouri S, **Antzelevitch C**. Sudden cardiac death secondary to antidepressant and antipsychotic drugs. *Expert Opin Drug Saf*, 7:181-194, 2008. PMID2365731
323. Delpón E, Cordeiro JM, Núñez L, Thomsen PEB, Guerchicoff A, Pollevick G, Wu Y-S, Kanters JK, Larsen CT, Burashnikov E, Christiansen M, **Antzelevitch C**. Functional effects of *KCNE3* mutation and its role in the development of Brugada syndrome. *Circ Arrhythmia Electrophysiol*, 1:209-218, 2008. PMID2585750
324. Wu L, Rajamani S, Shryock JC, Li H, Ruskin J, **Antzelevitch C**, Belardinelli L. Augmentation of late sodium current unmasks the proarrhythmic effects of amiodarone. *Cardiovasc Res*, 77:481-488, 2008. PMID2365898
325. Ravn LS, Aizawa Y, Pollevick GD, Hofman-Bang J, Cordeiro JM, Dixen U, Jensen G, Wu Y, Burashnikov E, Haunso S, Guerchicoff A, Hu D, Svendsen JH, Christiansen M, **Antzelevitch C**. Gain of function in IKs secondary to a mutation in *KCNE5* associated with atrial fibrillation. *Heart Rhythm*, 5:427-435, 2008. PMID2515863
326. Cordeiro J, Mazza M, Goodrow R, Ulahannan N, **Antzelevitch C**, Di Diego JM. Functionally distinct sodium channels in ventricular epicardial and endocardial cells contribute to a greater sensitivity of epicardium to electrical depression. *Am J Physiol Heart Circ Physiol*, 295:H154-H162, 2008. PMID2494739
327. Nam GB, MD, Kim YH, **Antzelevitch C**. Augmentation of J waves and electrical storms in patients with early repolarization. *N Engl J Med*, 358:2078-2079, 2008. PMID2515862
328. **Antzelevitch C**. Ranolazine: a new antiarrhythmic agent for patients with non-ST-segment elevation acute coronary syndromes? *Nat Clin Pract Cardiovasc Med*, 5:248-249, 2008. PMID2548402
329. Burashnikov A, Di Diego JM, Zygmunt AC, Belardinelli L, **Antzelevitch C**. Atrial-selective sodium channel block as a strategy for suppression of atrial fibrillation. *Ann NY Acad Sci* 1123: 105–112, 2008. PMID2366169

330. Patel C, **Antzelevitch C**. Cellular basis for arrhythmogenesis in an experimental model of the SQT1 form of the short QT syndrome. *Heart Rhythm*, 5:585-590, 2008. PMID2361425
331. Burashnikov A, **Antzelevitch C**. Atrial-selective sodium channel blockers: do they exist? *J Cardiovasc Pharm*, 52:121-128, 2008. PMID2574832
332. Patel C, **Antzelevitch C**. Pharmacological approach to the treatment of long and short QT Syndromes. *Pharmacol Ther*, 118:138-151, 2008. PMID2386155
333. **Antzelevitch C**. Drug-induced spatial dispersion of repolarization. *Cardiol J*, 15:100-121, 2008. PMID2497005
334. Sicouri S, Glass A, Belardinelli L, **Antzelevitch C**. Antiarrhythmic effects of ranolazine in canine pulmonary vein sleeve preparations. *Heart Rhythm* 5:1019-1026, 2008. PMID2517118
335. Burashnikov A, **Antzelevitch C**. Can inhibition of I_{Kur} promote atrial fibrillation? *Heart Rhythm*, 5:1304-1309, 2008. PMID2632605
336. Burashnikov A, Shimizu W, **Antzelevitch C**. Fever accentuates transmural dispersion of repolarization and facilitates the development of early afterdepolarizations and torsade de pointes under long QT conditions. *Circ Arrhythmia Electrophysiol*, 1:202-208, 2008. PMID2600866
337. **Antzelevitch C**, Nof E. Brugada syndrome: recent advances and controversies. *Curr Cardiol Rep*, 10:376-383, 2008. PMID2614235
338. Burashnikov A., **Antzelevitch C**. How do atrial-selective drugs differ from antiarrhythmic drugs currently used in the treatment of atrial fibrillation? Invited review. *J Atrial Fibrillation*, 1:98-107, 2008. NIHMSID64202
339. Burashnikov A, Di Diego JM, Sicouri S, Ferreira M, Carlsson LG, **Antzelevitch C**. Atrial-selective effects of chronic amiodarone in the management of atrial fibrillation. *Heart Rhythm* 5:1735-1742, 2008. PMID2640450
340. Barajas-Martínez HM, Hu D, Cordeiro JM, Wu Y, Kovacs RJ, Meltser H, Hong K, Burashnikov E, Brugada R, **Antzelevitch C**, Dumaine R. Lidocaine-induced Brugada syndrome phenotype linked to a novel double mutation in the cardiac sodium channel. *Circ Res*, 103:396-404, 2008. PMID2575042
341. Schimpf R, **Antzelevitch C**, Haghi D, Giustetto C, Pizzuti A, Gaita F, Veltmann C, Wolpert C, Borggrefe M. To the editor response. *Heart Rhythm*. 5:1091-1092, 2008.
342. Nof E, **Antzelevitch C**. Risk stratification of Brugada syndrome revisited. *Isr Med Assoc J*, 10:462-464, 2008. PMID2562553
343. Pérez Riera AR, Filho CF, Uchida AH, Zhang L, **Antzelevitch C**, Schapachnik E, Dubner S, Ferreira C. Study of the extent of the information of cardiologists from São

- Paulo City, Brazil, regarding a low-prevalence entity: Brugada syndrome. *Ann Noninvasive Electrocardiol*, 13:352-363, 2008. PMID2586670
344. Wolpert C, Veltmann C, Schimpf R, **Antzelevitch C**, Gussak I, Borggrefe M. Is a “narrow and tall” QRS complex an ECG marker for sudden death? *Heart Rhythm*, 5:1339-1345, 2008. PMID2570045
345. Wu L, Guo D, Hong L, Hackett J, Yan GX, Jiao Z, **Antzelevitch C**, Shryock JC, Belardinelli L. Role of late sodium current in modulating the proarrhythmic and antiarrhythmic effects of quinidine. *Heart Rhythm* 5:1726-1734, 2008. PMID2669543
346. Cordeiro JM, Marieb M, Pfeiffer R, Calloe K, Burashnikov E, **Antzelevitch C**. Accelerated inactivation of the L-type calcium current due to a mutation in CACNB2b underlies Brugada syndrome. *J Mol Cell Cardiol*, 46:695-703, 2009. PMID2668128
347. Sicouri S, Belardinelli L, Carlsson L, **Antzelevitch C**. Potent antiarrhythmic effects of chronic amiodarone in canine pulmonary vein sleeve preparations. *J Cardiovasc Electrophysiol*, 20:803-810, 2009. PMID2730672
348. Nof E, Glickson M, **Antzelevitch C**. Genetics and sinus node dysfunction. *J Atrial Fibrillation*, 1:328-336, 2009. NIHMSID150203
349. Kowey P, **Antzelevitch C**, Burke J, Patel C, Yan GX. Cellular basis of the T wave: a century of controversy. *Circ Arrhythmias Electrophysiol*, Invited Review, 2:80-88, 2009. PMID2662714
350. Oliva A, Hu D, Viskin S, Carrier T, Cordeiro JM, Barajas-Martinez H, Wu Y, Burashnikov E, Brugada R, Rosso R, Guerchicoff A, Pollevick G, Pascali VL, **Antzelevitch C**. SCN5A mutation associated with acute myocardial infarction. *Leg Med (Tokyo)*, 11 Suppl 1:S206-S209, 2009. PMID2813686
351. Calloe K, Cordeiro JM, Di Diego JM, Hansen RS, Grunnet M, Olesen SP, **Antzelevitch C**. A novel transient outward potassium current activator recapitulates the electrocardiographic manifestations of Brugada syndrome. *Cardiovasc Res*, 81:686-694, 2009. PMID2642600
352. Patel C, Burke JF, Patel H, Gupta P, Kowey PR, **Antzelevitch C**, Yan GX. Is there a significant transmural gradient in repolarization time in the intact heart? Cellular basis of the T wave: a century of controversy. *Circ Arrhythm Electrophysiol*. 2:80-88, 2009. PMID2669543
353. Viskin S, Wilde AA, Tan HL, **Antzelevitch C**, Shimizu W, Belhassen B. Empiric quinidine therapy for asymptomatic Brugada syndrome: time for a prospective registry. *Heart Rhythm*. 6:401-404, 2009. PMID19251219
354. Burashnikov A, **Antzelevitch C**. Mechanisms of arrhythmias and conduction disturbances. *In: Hurst's the Heart Manual of Cardiology, 12th addition*. O'Rourke RA,

- Walsh R, Fuster V, eds. McGraw-Hill Medical Publishing Division, New York, NY, 95-103, 2009.
355. Hu D, Barajas-Martinez H, Burashnikov E, Springer M, Wu Y, Varro A, Pfeiffer R, Koopmann TT, Cordeiro JM, Guerchicoff A, Pollevick GD, **Antzelevitch C**. A mutation in the $\beta 3$ subunit of the cardiac sodium channel associated with Brugada ECG phenotype. *Circ Cardiovasc Genet*, 2:270-278, 2009. PMID2801870
 356. Burashnikov A, **Antzelevitch C**. Atrial-selective sodium channel block for the treatment of atrial fibrillation. *Exp Opin Emerg Drugs*, 14:233-249, 2009. PMID2756337
 357. Burashnikov A, **Antzelevitch C**. New pharmacological strategies for the treatment of atrial fibrillation. *Ann Noninvasive Electrocardiol*, 14:290-300, 2009. PMID2714478
 358. **Antzelevitch C**, Burashnikov A. Atrial-selective sodium channel block as a novel strategy for the management of atrial fibrillation. *J Electrocardiol*, 42:543-548, 2009. PMID2767400
 359. Nam GB, Ko KH, Kim J, Park KM, Rhee KS, Choi KJ, Kim YH, **Antzelevitch C**. Mode of onset of ventricular fibrillation in patients with early repolarization pattern vs. Brugada syndrome. *Eur Heart J*, 31:330-339, 2010. PMID2814221
 360. Nof E, **Antzelevitch C**, Glickson M. The contribution of HCN4 to normal sinus node function in humans and animal models. *Pacing Clin Electrophysiol*, 33:100-106, 2010. NIHMSID157119
 361. Burashnikov A, **Antzelevitch C**. Novel pharmacological targets for the management of atrial fibrillation. *In: Novel Therapeutic Targets for Antiarrhythmic Drugs*. Billman GE, ed. Wiley, Hoboken, NJ, 461-478, 2010.
 362. Calloe K, Jespersen T, Lundby A, **Antzelevitch C**, Olesen SP, Cordeiro J. Differential effects of the transient outward K⁺ current activator NS5806 in the canine left ventricle. *J Mol Cell Cardiol*, 48:191-200, 2010. PMID2813348
 363. Shimizu W, **Antzelevitch C**. Long QT syndrome. *In: Encyclopedic Reference of Molecular Mechanisms of Disease*. Lang F, ed. Springer Publishing, Berlin, Germany. In press, 2009.
 364. Kapplinger JD, Tester DJ, Alders M, Benito B, Berthet M, Brugada J, Brugada P, Fressart V, Guerchicoff A, Harris-Kerr C, Kamakura S, Kyndt F, Koopmann TT, Miyamoto Y, Pfeiffer R, Pollevick GD, Probst V, Zumhagen S, Vatta M, Towbin JA, Shimizu W, Schulze-Bahr E, **Antzelevitch C**, Salisbury BA, Guicheney P, Wilde AAM, Brugada R, Schott JJ, Ackerman MJ. An international compendium of mutations in the SCN5A encoded cardiac sodium channel in patients referred for Brugada syndrome genetic testing. *Heart Rhythm*, 7:33-46, 2010. PMID2822446

365. Sicouri S, Glass A, Ferreiro M, **Antzelevitch C**. Trans-septal dispersion of repolarization and its role in the development of torsade de pointes arrhythmias. *J Cardiovasc Electrophysiol*, 21:441-447, 2010. NIHMSID: NIHMS150229
366. Sicouri S, Burashnikov A, Belardinelli L, **Antzelevitch C**. Synergistic electrophysiologic and antiarrhythmic effects of the combination of ranolazine and chronic amiodarone in canine atria. *Circ Arrhythm Electrophysiol*, 3:88-95, 2010. PMID2824029
367. Viskin S, Rosso R, Márquez MF, **Antzelevitch C**. The acquired Brugada syndrome and the paradox of choice. *Heart Rhythm*. 6:1342-1344, 2009. PMID2754213
368. **Antzelevitch C**, Burashnikov A. Atrial selective sodium channel block as a novel strategy for the management of atrial fibrillation. *Ann NY Acad Sci*, 1188:78-86, 2010. NIHMS186170
369. Burashnikov A, **Antzelevitch C**. What electrophysiological characteristics are desirable in a drug to suppress and prevent the recurrence of atrial fibrillation? ISHNE Third-AF World-Wide Internet Symposium (www.af-symposium.org), 2009.
370. Burashnikov A, **Antzelevitch C**. New developments in atrial antiarrhythmic drug therapy. *Nat Cardiol Rev*, 7:139-148, 2010. PMID2844858
371. Nof E, Burashnikov A, **Antzelevitch C**. Cellular basis for atrial fibrillation in an experimental model of short QT1: implications for a pharmacologic approach to therapy. *Heart Rhythm*, 7:251-257, 2010. PMID2826201
372. Hu D, Pfeiffer R, Barajas-Martinez H, Guerchicoff A, Curtis A, Cordeiro JM, Pollevick G, **Antzelevitch C**. Dual variations in SCN5A and CACNB2b underlie the development of cardiac conduction disease without the manifestation of Brugada syndrome. *Pacing Clin Electrophysiol*, 33:274-285, 2010. NIHMS167126
373. Chamberland C, Barajas-Martinez H, Haufe V, Fecteau MH, Delabre JF, Burashnikov A, **Antzelevitch C**, Lesur O, Chraïbi A, Sarret P, Dumaine R. Modulation of canine cardiac sodium current by Apelin. *J Mol Cell Card*, 48:694-701, 2010. PMID2837777
374. **Antzelevitch C**, Yan GX. J wave syndromes. *Heart Rhythm*, 7:549-558, 2010. PMID2843811
375. Wu J, Shimizu W, Ding WG, Ohno S, Toyoda F, Itoh H, Zang WJ, Miyamoto Y, Kamakura S, Matsuura H, Nademanee K, Brugada J, Brugada P, Brugada R, Vatta M, Towbin J, **Antzelevitch C**, Horie M. KCNE2 modulation of Kv4.3 current and its potential role in fatal rhythm disorders. *Heart Rhythm*, 7:199-205, 2010. PMID2819024
376. Gunaseeli I, Doss MX, **Antzelevitch C**, Hescheler J, Sachinidis A. Induced pluripotent stem cells as a model for accelerated patient- and disease-specific drug discovery. *Curr Med Chem*, 17:759-766, 2010. PMID2844480

377. **Antzelevitch C**, Yan GX. Ionic and cellular basis for arrhythmogenesis. *In: Management of Cardiac Arrhythmias*. Yan GX, Kowey P, eds. Springer Science & Business Media, LLC, Berlin, Germany, In press, 2010.
378. Chen PS, **Antzelevitch C**. Mechanisms of cardiac arrhythmias and conduction disturbances. *In: Hurst's The Heart* 13th ed. Fuster V, O'Rourke R, Walsh R, Poole-Wilson P, eds. McGraw Hill, New York, NY, In press, 2010.
379. Patel C, Yan GX, **Antzelevitch C**. Short QT Syndrome. Clinical Presentation, Molecular, Genetic, Cellular and Ionic Basis. *In: Management of Cardiac Arrhythmias*. Yan GX, Kowey P, eds. Springer Science & Business Media, LLC, Berlin, Germany, In press, 2010.
380. **Antzelevitch C**, Cordeiro JM. Ion channelopathies. Mechanisms and genotype-phenotype correlations. *In: Electrophysiological Disorders of the Heart*. Saksena S, Camm AJ, eds. Elsevier, Inc., Philadelphia, PA, In press. 2010.
381. **Antzelevitch C**, Cordeiro JM. Ventricular arrhythmia in structurally normal hearts. *In: Ventricular Arrhythmias: From Principles to Patients*. Dudley SC, Kocheril AG, Sovari AA, eds. Nova Science Publishers, Inc., Hauppauge, NY, In press. 2010.
382. Viskin S, Postema PG, Bhuiyan ZA, Russo R, Kalman JM, Vohra JK, Guevara-Valdivia ME, Marquez MF, Kogan E, Belhassen B, Glikson M, Strasberg B, **Antzelevitch C**, Wilde AAM. The response of the QT interval to the brief tachycardia provoked by standing: a bedside test for diagnosing long QT syndrome. *J Am Coll Cardiol*, 55:1955-1961, 2010. NIHMSID174269
383. Patel C, Yan GX, **Antzelevitch C**. Short QT syndrome. From bench to bedside. *Circ Arrhythm Electrophysiol*, In press, 2010.
384. Burashnikov A, Zygmunt AC, Di Diego JM, Linhardt G, Carlsson L, **Antzelevitch C**. AZD1305 exerts atrial-predominant electrophysiological actions and is effective in suppressing atrial fibrillation and preventing its re-induction in the dog. *J Cardiovasc Pharmacol*, In press, 2010. NIHMSID: NIHMS196189
385. Sicouri S, Carlsson L, **Antzelevitch C**. Electrophysiologic and antiarrhythmic effects of AZD1305 in canine pulmonary vein sleeves. *J Pharmacol Exp Ther*, 334:255-259. *PMC Journal - In Process*
386. Nof E, Cordeiro JM, Pérez GJ, Scornik FS, Calloe K, Love B, Burashnikov E, Caceres G, Gunsburg M, **Antzelevitch C**. A common single nucleotide polymorphism can aggravate long QT type 2 syndrome leading to sudden infant death. *Circ Cardiovasc Genet*, 3:199-206, 2010. NIHMSID: NIHMS182978
387. **Antzelevitch C**. M cells in the human heart. *Circ Res*, 106:815-817, 2010.
388. Burashnikov A, **Antzelevitch C**. Advances in the pharmacological treatment of atrial fibrillation. *Curr Med Lit Cardiol*, 29:1-5, 2010. NIHMSID: NIHMS215892

389. Bloch Thomsen PE, Johannessen A, Jons C, Hansen TF, Kanters JK, Haarbo J, Hansen J, Christiansen LK, Sogaard P, Saermark K, **Antzelevitch C**. The role of local voltage potentials in outflow tract ectopy. *Europace*, 12:850-860, 2010. NIHMS: NIHMS201722.
390. Burashnikov A, Belardinelli L, **Antzelevitch C**. Acute dronedarone is inferior to amiodarone in terminating and preventing atrial fibrillation in canine atria. *Heart Rhythm*, In press, 2010. NIHMSID: NIH215851
- 391.

b. Books

1. *Clinical Approaches to Tachyarrhythmias: The Brugada Syndrome*. **Antzelevitch C**, Brugada P, Brugada J, Brugada R, Nademanee K, Towbin J, eds, Camm JA. Futura Publishing Company, Armonk, NY, 1999.
2. *Cardiac Repolarization. Bridging Basic and Clinical Science*, Gussak I, **Antzelevitch C**, eds. Humana Press, NY, 2003.
3. *The Brugada Syndrome. From Bench to Bedside*. **Antzelevitch C**, ed. Blackwell, Futura, Malden, MA, 2005.
4. *Electrical Diseases of the Heart and Sudden Cardiac Death*. Gussak I, **Antzelevitch C**, eds. Springer, London, England, 2008.

c. Abstracts

1. **Antzelevitch C**, Kabela E: Electrophysiological effects of quinidine on atrial working and conducting cells. A reevaluation. *Fed Proc* 36:1003, 1977.
2. **Antzelevitch C**, Kabela E: Mechanism underlying the increase in refractory period produced by quinidine. *J of Mol and Cell Cardiology* 9:12, 1977.
3. **Antzelevitch C**, Jalife J, Moe GK. Effect of electrotonic potentials on pacemaker activity of Purkinje fibers exposed to acetylcholinesterase. *Fed Proc* 37:656, 1978.
4. **Antzelevitch C**, Jalife J, Moe GK. Characteristics of reflection as a mechanism of arrhythmogenesis. *Fed Proc* 38:1116, 1979.
5. Jalife J, **Antzelevitch C**, Moe GK. Impulse conduction and reflection in isolated cardiac Purkinje fibers. *Fed Proc* 38:371, 1979.

6. **Antzelevitch C**, Jalife J, Moe GK. Reflection as a mechanism of reentrant arrhythmias. *Circulation* 60:II-208, 1979.
7. Jalife J, **Antzelevitch C**, Lamanna V, Moe GK. The cellular mechanism of bradycardia-dependent bundle branch block. *Circulation*, 62:III-55, 1980.
8. Lamanna V, **Antzelevitch C**, Moe GK. Effects of lidocaine on a reflection model of reentrant arrhythmias. *Circulation*, 62:III-138, 1980.
9. Lamanna V, **Antzelevitch C**, Moe GK. Effects of lidocaine on the propagation of the slow response in canine false tendons. *Physiologist*, 23:103, 1980.
10. **Antzelevitch C**, Bernstein M, Feldman H, Moe GK. Modulated parasystole, reflection and tachycardia. A canine model of electrotonically-mediated cardiac dysrhythmias. *Fed Proc*, 41:1382, 1982.
11. **Antzelevitch C**, Moe GK. Electrotonic inhibition of impulse transmission across inexcitable segments of cardiac tissue. *Circulation*, 66:II-358, 1982.
12. **Antzelevitch C**, Bernstein MJ, Feldman H, Moe GK. Parasystole, reentry and tachycardia. A canine model of cardiac dysrhythmias occurring across inexcitable segments of tissue. Cardiac Electrophysiology Society Annual Meeting, 55th Scientific Sessions American Heart Association, Dallas, TX, 1982.
13. **Antzelevitch C**, Moe GK. Impulse transmission across inexcitable segments of cardiac tissue. Electrotonic inhibition and summation. *Fed Proc*, 42:730, 1983.
14. **Antzelevitch C**, Moe GK. An ionic mechanism contributing to the frequency dependence of conduction across segments of depressed cardiac tissue. 56th Scientific Sessions, American Heart Association. *Circulation*, 68:III-19, 1983.
15. Davidenko J, **Antzelevitch C**, Moe GK. Electrophysiologic actions of milrinone on canine Purkinje fibers. *Fed Proc*, 43:810, 1984.
16. **Antzelevitch C**, Shen XT. Mechanisms underlying the antiarrhythmic and arrhythmogenic actions of quinidine on reentrant arrhythmias. *Fed Proc*, 44:713, 1985.
17. Moe B, Davidenko JM, **Antzelevitch C**. Quinidine-induced triggered activity. Effect of magnesium. *Fed Proc*, 44:899, 1985.
18. Davidenko JM, **Antzelevitch C**, Moe GK. Mechanisms underlying rate-dependent changes of refractoriness in segmentally depressed Purkinje fibers. *Fed Proc* 44:1580, 1985.
19. Vetulli H, **Antzelevitch C**. Quinidine induced early afterdepolarizations, triggered activity and dispersion of refractoriness in canine Purkinje muscle preparations X World Congress of Cardiology, 1986.

20. Litovsky S, **Antzelevitch C**. The transient outward current. Canine epicardium vs endocardium. *Circulation*, 74:II-255, 1986.
21. **Antzelevitch C**, Litovsky S. Transient outward current present in canine ventricular epicardium but not endocardium. *Fed Proc*, 46:1262, 1987.
22. Litovsky S, Krishnan S, **Antzelevitch C**. Rate dependence of action potential duration and refractory period in epicardium and endocardium of canine ventricle. *Fed Proc*, 46:335, 1987.
23. Sicouri S, Litovsky S, Krishnan S, **Antzelevitch C**. Quinidine - induced early afterdepolarizations in canine ventricular muscle. *Circulation*, 76:IV-150, 1987.
24. Iodice A, Sicouri S, **Antzelevitch C**. Slow tissue uptake of quinidine may account for the slow development of the drug's electrophysiological action in canine tissue. *FASEB J*, 15:A1277, 1988.
25. Litovsky S, **Antzelevitch C**. Differences in electrophysiological responses of canine epicardium and endocardium to changes in $[K^+]_o$ may explain classical ST-T changes. *FASEB J* 15:A930, 1988.
26. Lukas A, **Antzelevitch C**. Does the transient outward current contribute to selective electrical depression of canine epicardium during ischemia? *FASEB J* 15:A930, 1988.
27. Sicouri S, **Antzelevitch C**. Quinidine induced early afterdepolarization (EAD) develop slowly in canine ventricular muscle. *FASEB J*, 15:A1277, 1988.
28. Cohen L, **Antzelevitch C**. Electrophysiological effects of quinidine in canine Purkinje fibers does not reach a steady state for several hours. *FASEB J* 15:A1277, 1988.
29. **Antzelevitch C**, Sicouri S, Iodice A, Cohen L, Gintant G. Quinidine-induced early afterdepolarizations and triggered activity. *Cardio-Stim* 88, 1988.
30. **Antzelevitch C**, Litovsky S, Lukas A. Reflection as a subclass of reentrant cardiac arrhythmias. *Cardio-Stim*, 88, 1988.
31. Litovsky SH, **Antzelevitch C**. Restitution of action potential duration (APD) in epicardium parallels the recovery of the transient outward current (I_{to}). *Circulation*, 78:123, 1988.
32. Sicouri S, Cohen L, **Antzelevitch C**. Acute studies may not be representative of quinidine's antiarrhythmic efficacy. *Circulation*, 78:147, 1988.
33. Iodice A, Sicouri S, **Antzelevitch C**. Quinidine-induced prolongation of the action potential develops slowly due to intracellular uptake of the drug. *Pacing Clin Electrophysiol*, 12:671, 1989.

34. Lukas A, **Antzelevitch C**. The transient outward current contributes to selective depression of electrical activity in canine epicardium under ischemic conditions. *Pacing Clin Electrophysiol*, 12:639, 1989.
35. Sicouri S, Cohen P, **Antzelevitch C**. Electrophysiologic effects of quinidine differ in canine endocardial and epicardial tissues: The role of the transient outward current. *Pacing Clin Electrophysiol*, 12:669, 1989.
36. Litovsky S, **Antzelevitch C**. Differences in the electrophysiology of ventricular epicardium and endocardium as the basis for the Osborne wave. *Circulation*, 80:II-129, 1989.
37. Sicouri S, Gintant G, **Antzelevitch C**. A population of cells with unique electrophysiologic characteristics in the deep subepicardium of the canine ventricle. *FASEB J*, 4:561, 1990.
38. Krishnan SC, **Antzelevitch C**. Tetrodotoxin prolongs action potential duration in canine ventricular epicardium but abbreviates it in endocardium. *FASEB J*, 4:561, 1990.
39. Iodice A, Sicouri S, **Antzelevitch C**. Influence of pH on the electrophysiologic actions and tissue uptake of quinidine. *FASEB J*, 4:561, 1990.
40. Di Diego JM, **Antzelevitch C**. The electrophysiologic effects of amiloride in canine ventricular myocardial tissues. *FASEB J*, 4:A-562, 1990
41. Sicouri S, **Antzelevitch C**. Drug-induced early afterdepolarizations and triggered activity in deep subepicardium of the canine ventricle. *Pacing Clin Electrophysiol*, 13:520, 1990.
42. Litovsky S, **Antzelevitch C**. Differences in the electrophysiologic response of canine ventricular subendocardium and subepicardium to acetylcholine and isoproterenol. A direct effect of acetylcholine in ventricular myocardium. *Pacing Clin Electrophysiol*, 13:499, 1990.
43. Lukas A, **Antzelevitch C**. Reentry induced by "ischemia" in isolated canine subepicardium: Role of the transient outward current. *Pacing Clin Electrophysiol*, 13:500, 1990.
44. Di Diego JM, **Antzelevitch C**. Pinacidil-induced reentrant arrhythmias in isolated canine ventricular epicardium. *Circulation*, 82:III-528, 1990.
45. Litovsky SH, Sicouri S, **Antzelevitch C**. Electrophysiologic effects of amiodarone on canine ventricular epicardium and endocardium differ. *Circulation*, 82:III-529, 1990.
46. Litovsky SH, Sicouri S, **Antzelevitch C**. Sodium Channel Block by Chronic Amiodarone treatment: Purkinje fibers vs ventricular muscle. *Circulation*, 82:III-529, 1990.

47. Sicouri S, **Antzelevitch C.** Drug-induced early and delayed afterdepolarizations and triggered activity in deep subepicardial cells (M cells) of the canine ventricle. *Circulation* 82:III-645, 1990.
48. Di Diego JM, **Antzelevitch C.** The role of ATP-sensitive potassium currents in the genesis of cardiac arrhythmias. Proceedings of the SUNY HSC Fourth Annual Poster Session, 112, 1990.
49. Litovsky SH, Sicouri S, **Antzelevitch C.** Electrophysiologic effects of Amiodarone. Proceedings of the SUNY HSC Fourth Annual Poster Session, 110, 1990.
50. Sicouri S, **Antzelevitch C.** Early and delayed afterdepolarization and triggered activity in deep subepicardial cells of the canine ventricle. Proceedings of the SUNY HSC Fourth Annual Poster Session, 48, 1990.
51. Sicouri S, **Antzelevitch C.** Bay K 8644 induced early and delayed afterdepolarizations (EAD DAD) and triggered activity in deep subepicardial cells (M cells) of the canine ventricle. IX World Symposium on Cardiac Pacing and Electrophysiology, *Pacing Clin Electrophysiol*, 14:649, 1991.
52. Sicouri S, **Antzelevitch C.** Characteristics of digitalis-induced delayed afterdepolarization (DAD) and triggered activity in deep subepicardial cells (M cells) of the canine ventricle. IX World Symposium on Cardiac Pacing and Electrophysiology, *Pacing Clin Electrophysiol*, 14:649,1991.
53. Di Diego JM, **Antzelevitch C.** Antiarrhythmic effects of 4-aminopyridine (4-AP) and glyburide in isolated ventricular myocardium. *Pacing Clin Electrophysiol*, 14:649, 1991.
54. Iodice A, Sicouri S, **Antzelevitch C.** Long term exposure of canine ventricular myocardium to low levels of quinidine produces different electrophysiological effects from short term exposure to high levels of drug. Correlation with tissue uptake. *Pacing Clin Electrophysiol*, 14:4,725, 1991.
55. Sicouri S, **Antzelevitch C.** Drug-induced afterdepolarizations and triggered activity occur in a select subpopulation of cells (M cells) in the deep subepicardium of the canine ventricle. Proceedings of the American Physiologic Society (APS) Conference: From Channels to Cross Bridges. *The Physiologist* 34:112, 1991.
56. Di Diego JM, **Antzelevitch C.** Pinacidil-induced reentrant arrhythmias in isolated canine ventricular epicardium. Proceedings of the American Physiologic Society (APS) Conference: From Channels to Cross Bridges. *The Physiologist*, 34:112, 1991.
57. Lukas A, Di Diego JM, **Antzelevitch C.** The effects of outward channel current blockers on reentrant arrhythmias induced by simulated ischemia in canine ventricular epicardium. Proceedings of the Upstate New York Cardiac Electrophysiology Society Meeting, 1991.

58. Sicouri S, **Antzelevitch C**. Distribution and Characteristics of M cells in the Canine ventricle. Pharmacologic distinctions between epicardial, endocardial and M cells. Proceedings of the Upstate New York Cardiac Electrophysiology Society Meeting, 1991.
59. Liu D-W, Gintant GA, **Antzelevitch C**. Electrophysiologic characteristics of myocytes isolated from canine ventricular epicardium, midmyocardium and endocardium. Proceedings of the Upstate New York Cardiac Electrophysiology Society Meeting, 1991.
60. Lukas A, **Antzelevitch C**. Antiarrhythmic effects of 4-aminopyridine, a transient outward current blocker, on "ischemia"-induced reentry in isolated canine ventricular subepicardium. *Circulation*, 84:II-506, 1991.
61. Sicouri S, **Antzelevitch C**. Electrophysiological characteristics and transmural distribution of M cells in the canine ventricle. *Circulation*, 84:II-179, 1991.
62. Di Diego J, Sicouri S, Litovsky SH, **Antzelevitch C**. Two components of the transient outward current in canine ventricular epicardium: Right versus left. *Circulation*, 84:II-179, 1991.
63. Di Diego JM, **Antzelevitch C**. Amiloride suppression of pinacidil-induced reentrant arrhythmias in isolated canine ventricular myocardium. *Circulation*, 84:II-551, 1991.
64. Sicouri S, **Antzelevitch C**. Electrophysiological characteristics and transmural distribution of M cells in the canine ventricle. Proceedings of the Poster Competition, SUNY Health Science Center at Syracuse, 1991.
65. Di Diego J, Sicouri S, Litovsky SH, **Antzelevitch C**. Two components of the transient outward current in canine ventricular epicardium: Right versus left. Proceedings of the Poster Competition, SUNY Health Science Center at Syracuse, 1991.
66. Liu D-W, Gintant G, **Antzelevitch C**. Ionic bases for electrophysiologic distinctions among epicardial, midmyocardial and endocardial myocytes from the free wall of the canine left ventricle. NASPE Young Investigator's Award Competition. FIRST PRIZE. *Pacing Clin Electrophysiol*, 4:537, 1992.
67. Krishnan SC, **Antzelevitch C**. Sodium channel block produces opposite electrophysiologic effects in canine ventricular epicardium and endocardium. Proceedings of NIH competition, October, 1992.
68. Sicouri S, Fish J, and **Antzelevitch C**. Distribution of M cells in the canine ventricle. Proceedings of the Second Annual Meeting of the Upstate New York Cardiac Electrophysiology Society, 1992.
69. Di Diego J, Mudigonda S, **Antzelevitch C**. High Ca^{2+} -induced electrical heterogeneity and ectopic activity in canine ventricular myocardium. Proceedings of the Second Annual Meeting Upstate New York Cardiac Electrophysiology Society, 1992.

70. Lukas A and **Antzelevitch C.** Differential sensitivities of canine ventricular myocytes of epicardial, midmyocardial and endocardial origin to simulated ischemia. Upstate New York Cardiac Electrophysiology Society Second Annual meeting, September 1992.
71. Lukas A and **Antzelevitch C.** Action potential shortening induced by metabolic inhibition in canine epicardial myocytes can be reversed by blockade of the ATP-regulated K^+ or transient outward current. Upstate New York Cardiac Electrophysiology Society Second Annual meeting, September 1992.
72. Sicouri S, Zhang ZQ and **Antzelevitch C.** Pinacidil suppresses drug induced early afterdepolarizations and triggered activity in M cells from the deep subepicardium of the canine ventricle. Upstate New York Cardiac Electrophysiology Society Second Annual meeting, September 1992.
73. Nesterenko V, **Antzelevitch C.** Mathematical simulations of the electrocardiographic U wave. The role of M cells and resistive barriers. IEEE Proceedings, (Computers in Cardiology), 1992.
74. Nesterenko V, **Antzelevitch C.** M cells as the basis for the electrocardiographic U wave. Circulation, 86:I-302, 1992.
75. Lukas A, **Antzelevitch C.** Differential sensitivities of canine ventricular myocytes of epicardial, midmyocardial and endocardial origin to ischemia. Circulation, 86,I-300, 1992.
76. Lukas A, **Antzelevitch C.** Action potential shortening induced by metabolic inhibition in canine epicardial myocytes can be reversed by blockade of the ATP-regulated K^+ or transient outward current. Circulation, 86:I-698, 1992.
77. Di Diego J, **Antzelevitch C.** High Ca^{2+} -induced electrical heterogeneity and ectopic activity in canine ventricular myocardium. Circulation 86:I-301, 1992.
78. Sicouri S, Zhang ZQ, **Antzelevitch C.** Pinacidil suppresses drug-induced early afterdepolarizations and triggered activity in deep subepicardial M cells in the canine ventricle. Pacing Clin Electrophysiol, 16(II):939, 1993.
79. Liu D-W, Sicouri S, **Antzelevitch C.** Characteristics of digitalis-induced delayed afterdepolarizations in myocytes from the M region of the canine left ventricle. Pacing Clin Electrophysiol, 16(II):886, 1993.
80. Liu D-W, **Antzelevitch C.** Delayed rectifier K^+ current differs among canine ventricular myocytes of epicardial, midmyocardial and endocardial origin. Pacing Clin Electrophysiol, 16(II):870, 1993.
81. Sicouri S, **Antzelevitch C.** Distribution of M cells in the canine ventricle. Pacing Clin Electrophysiol, 16(II):898, 1993.

82. Sicouri S, Fish J, **Antzelevitch C**. Quinidine-induced early afterdepolarization and triggered activity arising from M cells located in endocardial structures of the canine ventricle. *Circulation*, 88:I-37, 1993.
83. Zhang Z-Q, **Antzelevitch C**. Erythromycin produces prominent action potential prolongation and early afterdepolarization (EAD)-induced triggered activity in M but not epicardial or endocardial regions of the canine ventricle. *Circulation*, 88:I-327, 1993.
84. **Antzelevitch C**. Electrical heterogeneity in the heart as the basis for electrocardiographic manifestations and pharmacologic distinctions. 58th Annual Scientific Meeting of the Japanese Circulation Society, 44-45, 1994.
85. Liu D-W, **Antzelevitch C**. Evidence for a rapidly activating but slowly deactivating E-4031-sensitive component of the delayed rectifier K⁺ current (IKr) in canine ventricular myocytes. *Pacing Clin Electrophysiol*, 17:II-755, 1994.
86. **Antzelevitch C**. M cells are responsible for afterdepolarizations that contribute to torsade de pointes (TdP) - *European Journal of Cardiac Pacing and Electrophysiology*, 4, Supp 4:17, 1994.
87. Nesterenko VV, **Antzelevitch C**. Monophasic action potential (MAP) recordings display “apparent” early afterdepolarizations (EAD) when action potentials of deep myocardial cells are prolonged. A computer simulation study. *Circulation*, 90:I-183, 1994.
88. Liu D-W, **Antzelevitch C**. Two components of the delayed rectifier in canine ventricular myocytes. A weaker IKs but not IKr contributes to the longer action potential of M cell. *Circulation*, 90:I-581, 1994.
89. Zygmunt A and **Antzelevitch C**. Reduction of external sodium does not reduce Ito1 in canine ventricular myocytes. *Biophysical J*, 68:A38, 1995.
90. Yan G-X, **Antzelevitch C**. Contributions of M cells to the electrocardiographic U wave: Direct evidence from arterially perfused canine left ventricle. *Pacing Clin Electrophysiol*, II-933, 1995.
91. Nesterenko VV, **Antzelevitch C**. Factors responsible for “apparent” early afterdepolarizations (EAD) in Monophasic action potential (MAP) recordings. A model study. *Pacing Clin Electrophysiol*, II-830, 1995.
92. Nesterenko VV, **Antzelevitch C**. Morphologic diversity of the electrocardiographic T-U complex reflects electrical properties of deep myocardial cells: a model study. *Pacing Clin Electrophysiol*, II-896, 1995.
93. Burashnikov A, **Antzelevitch C**. α -Agonists produce opposite effect on action potential duration in Purkinje and M cells isolated from the canine left ventricle. *Pacing Clin Electrophysiol*, 18:II-935, 1995.

94. **Antzelevitch C**, Nesterenko VV. The role of M cells in acquired LQTS, U waves and Torsade de Pointes. Proceedings of International Society of Computerized Electrocardiography, V-2, 1995.
95. Yan GX, McMahan B, **Antzelevitch C**. The roles of delayed repolarization of M cells in the generation of electrocardiographic U waves, notched T waves, long QT intervals and torsade de pointes. Proceedings of the Upstate New York Cardiac Electrophysiology Society Annual Meeting, 1995.
96. Yan GX, **Antzelevitch C**. Cellular basis for the electrocardiographic J wave. Fifth Annual Meeting Upstate New York Cardiac Electrophysiology Society, 1995.
97. Sun Z-Q, **Antzelevitch C**, Zhang Z-Q, Yan G-X. Cellular and ionic mechanisms underlying erythromycin -induced long QT and Torsade de Pointes. Fifth Annual Meeting Upstate New York Cardiac Electrophysiology Society, 1995.
98. Weissenburger J, Nesterenko VV, **Antzelevitch C**. Intramural monophasic action potentials (MAP) display steeper APD-rate relations and higher sensitivity to class III agents than epicardial and endocardial MAPs: characteristics of the M cell *in vivo*. Circulation, 92:I-300, 1995.
99. Yan GX, **Antzelevitch C**. Delayed repolarization of M cells underlies the manifestation of U waves, notched T waves and long QT intervals in the electrocardiogram(ECG). Circulation, 92:I-480, 1995.
100. Yan GX, **Antzelevitch C**. Cellular basis for the electrocardiographic J wave. Circulation, 92:I-71, 1995.
101. Burashnikov A, **Antzelevitch C**. Acceleration-induced early afterdepolarizations and triggered activity. Circulation, 92:I-434, 1995.
102. Yan GX, **Antzelevitch C**. Cellular basis for the electrocardiographic J wave. Proceedings of the 9th Annual Charles C. Ross Research Poster Session, SUNY HSC. 29, 1995.
103. Burashnikov A, **Antzelevitch C**. Acceleration-induced early afterdepolarizations and triggered activity. Proceedings of the 9th Annual Charles C. Ross Research Poster Session, SUNY HSC. 98, 1995.
104. Sun ZQ, **Antzelevitch C**, Zhang ZQ, Yan GX. Cellular and ionic mechanisms underlying erythromycin -induced long QT and Torsade de Pointes. Proceedings of the 9th Annual Charles C. Ross Research Poster Session, SUNY HSC. 102, 1995.
105. **Antzelevitch C**, Lukas A, Di Diego J, Sicouri S, Yan GX. Reentry caused by heterogeneities between epicardial, endocardial and midmyocardial sites: Pharmacological modification. Proceedings of 2nd Workshop on Antiarrhythmic Drugs and Self Ventricular Defibrillation, Slovak Republic, 1, 1995.

106. **Antzelevitch C**, Burashnikov A, Weissenburger J, Nesterenko V. Acceleration-induced EADs, APD prolongation and Torsade de Pointes. *Eur J Cardiac Pacing and Electrophysiol*, 6:2, 1996.
107. Weissenburger J, Nesterenko VV, **Antzelevitch C**. M cells contribute to transmural dispersion of repolarization and to the development of Torsade de Pointes in the canine heart in vivo. *Pacing Clin Electrophysiol*, 19:II-707, 1996.
108. Burashnikov A, **Antzelevitch C**. Mechanism of acceleration-induced early afterdepolarization activity and action potential prolongation in tissues isolated from the M region of the canine ventricle. *Pacing Clin Electrophysiol*, 19:II-645, 1996.
109. Burashnikov A., **Antzelevitch C**. β adrenergic stimulation produces transient action potential prolongation in canine ventricular M cells but not in Purkinje, epicardial, or endocardial cells when the contribution of IKr is reduced. *Pacing Clin Electrophysiol*, 19:II-639, 1996.
110. Sicouri S, Moro S, Leonardo NS, Elizari MV, Litovsky S, **Antzelevitch C**. Chronic amiodarone delays ventricular repolarization and reduces transmural dispersion of repolarization in the canine heart. *Pacing Clin Electrophysiol*, 19:II-638, 1996.
111. Eddlestone GT, Zygmunt AC, **Antzelevitch C**. Larger late sodium current contributes to the longer action potential of the M cell in canine ventricular myocardium. *Pacing Clin Electrophysiol*, 19:II-569, 1996.
112. Burashnikov AY, **Antzelevitch C**. Mechanisms underlying early afterdepolarization activity are different in canine Purkinje and M cell preparations. Role of intracellular calcium. *Circulation*, 94:I-527, 1996.
113. Sun ZQ, **Antzelevitch C**. Ionic basis for the electrocardiographic J wave. *Circulation*, 94:I-669, 1996.
114. Sun ZQ, Zhang ZQ, Yan GX, **Antzelevitch C**. Cellular and ionic mechanisms underlying the actions of erythromycin to induce Long QT and Torsade de Pointes. *Circulation*, 94:I-643, 1996.
115. Yan GX, **Antzelevitch C**. Induction of Torsade de Pointes in an isolated arterially perfused canine left ventricular wedge preparation: Role of intramural reentry. *Circulation*, 94:I-712, 1996.
116. Yan GX, **Antzelevitch C**. Cellular basis for idiopathic VT/VF syndrome. *Circulation*, 94:I-625, 1996.
117. Yan G-X, **Antzelevitch C**. Cellular basis for the normal T wave and the electrocardiographic manifestations of the long QT syndrome. *Young Investigator Award Finalist*. *J of Electrocardiology* 30 (Suppl):148, 1998.

118. **Antzelevitch C.** Cellular basis for QT dispersion. Proceedings of International Society for Computerized Electrocardiology, May, 1997
119. Burashnikov A, **Antzelevitch C.** Differences in the response of four canine ventricular cell types to $\alpha 1$ adrenergic agonists. PACE, 20:1115, 1997. *Featured Poster Presentation.*
120. Sun ZQ, Eddlestone GT, **Antzelevitch C.** Ionic mechanisms underlying the effects of sodium pentobarbital to diminish transmural dispersion of repolarization. Pacing Clin Electrophysiol, 20:1116, 1997. *Featured Poster Presentation.*
121. Shimizu W, **Antzelevitch C.** Sodium channel block with mexiletine is effective in reducing dispersion of repolarization and preventing Torsade de Pointes in LQT2 as well as LQT3 models of the Long QT Syndrome. Pacing Clin Electrophysiol, 20:1234, 1997. *First Prize NASPE Young Investigator Award.*
122. Sicouri S, Antzelevitch D, Heilmann C, **Antzelevitch C.** Effects of sodium channel block with mexiletine to reverse action potential prolongation in *in vitro* models of the Long QT Syndrome. Pacing Clin Electrophysiol, 20: II-1061, 1997.
123. Di Diego JM, **Antzelevitch C.** I_{Ca} inhibition and I_{K-ATP} activation induce a transmural dispersion of repolarization resulting in ST segment elevation and arrhythmias. Pacing Clin Electrophysiol, 20:II-1134, 1997.
124. Burashnikov A, Shimizu W, **Antzelevitch C.** Can a febrile state contribute to the development of the Long QT Syndrome? Results of studies conducted in tissues and perfused wedge preparations isolated from the canine left ventricle. Pacing Clin Electrophysiol, 20:II-1115, 1997. *Featured Poster Presentation.*
125. Burashnikov A, **Antzelevitch C.** A combination of I_{Kr} , I_{Ks} and I_{Ca} or I_{Na} block produces a relatively homogeneous prolongation of repolarization of cells spanning the canine left ventricular wall. Pacing Clin Electrophysiol, 20: II-1216, 1997.
126. Burashnikov A, **Antzelevitch C.** I_{Ks} block Promotes β adrenergic agonist-induced delayed afterdepolarization activity in canine ventricular myocardium, Circulation 96:I-293, 1997.
127. Burashnikov A, **Antzelevitch C.** Failure of canine ventricular epicardial and endocardial cells to develop early afterdepolarization activity is due to the presence of a prominent I_{Ks} . Circulation, 96:292, 1997.
128. Zygmunt AC, Goodrow RJ, **Antzelevitch C.** Mechanism of Ca-dependent inactivation of I_{Ca} in canine midmyocardial ventricular myocytes. Circulation, 96:I-357, 1997.
129. Shimizu W, **Antzelevitch C.** Characteristics of spontaneous as well as stimulation-induced Torsade de Pointes in LQT2 and LQT3 models of the long QT syndrome. Circulation, 96:I-554, 1997. *First Prize NASPE Young Investigator Award.*

130. Akar FG, Yan GX, **Antzelevitch C**, Rosenbaum DS. Optical maps reveal reentrant mechanism of Torsade de Pointes based on topography and electrophysiology of mid-myocardial cells. *Circulation*, 96:I-555, 1997.
131. Shimizu W, **Antzelevitch C**. Cellular basis for the electrocardiographic features of the LQT1 form of the long QT syndrome. Effects of β -adrenergic agonists, antagonists and sodium channel blockers on transmural dispersion of repolarization and Torsade de Pointes. *Young Investigator Award Finalist*. *J Am Coll Cardiol*, 31:2A, 1998.
132. **Antzelevitch C**, Yan GX. Idiopathic ventricular fibrillation: mechanisms. *Proceedings of Advances in Electrophysiology and Cardiac Arrhythmias: A Renaissance*, 1998.
133. **Antzelevitch C**, Shimizu W. Select mechanisms of proarrhythmia. *Proceedings of Advances in Electrophysiology and Cardiac Arrhythmias: A Renaissance*, 1998.
134. Nesterenko VV, **Antzelevitch C**. Spatial resolution of newly developed MAP recording techniques: Experimental evaluation in highly heterogeneous myocardium *in vitro*. *Pacing Clin Electrophysiol*, 21:II-857, 1998.
135. Shimizu W, **Antzelevitch C**. Cellular basis for T wave alternans in the long QT syndrome. *Pacing Clin Electrophysiol*, 21:II-856, 1998.
136. Shimizu W, **Antzelevitch C**. Differential effects of a K⁺ channel opener in reducing dispersion of repolarization and preventing Torsade de Pointes in LQT1, LQT2 and LQT3 models of the long QT syndrome. *Pacing Clin Electrophysiol*, 21:II-846, 1998.
137. Burashnikov A, **Antzelevitch C**. Temperature-dependence of early afterdepolarization activity in canine left ventricular M cell and Purkinje fiber preparations. *Pacing Clin Electrophysiol*, 21:II-857, 1998.
138. Eddlestone GT, Savas A, Heilmann C, **Antzelevitch C**. Mechanical heterogeneity in myocytes isolated from the left canine ventricle. *Pacing Clin Electrophysiol*, 21:II-856, 1998.
139. Burashnikov A, **Antzelevitch C**. IKs block produces action potential prolongation but not early afterdepolarizations in canine ventricular myocardium. *Circulation*, 98:I-814, 1998.
140. Shimizu W, **Antzelevitch C**. Differential Effects of β -Adrenergic Agonists and Antagonists on Transmural Dispersion of Repolarization and Torsade de Pointes in LQT1, LQT2 and LQT3 Models of the Long QT Syndrome. *Circulation*, 98:I-10, 1998.
141. Shimizu W, **Antzelevitch C**. Mexiletine is effective in reducing transmural dispersion of repolarization and preventing Torsade de Pointes in LQT1, LQT2 and LQT3 Models of the long QT syndrome. *Circulation*, 98:I-814, 1998.
142. Shimizu W, **Antzelevitch C**. Cellular and ionic basis for T wave alternans in the long QT syndrome. *Circulation*, 98:I-814, 1998.

143. Sicouri S, Sun ZQ, Eddlestone G, **Antzelevitch C**. Sodium pentobarbital reduces transmural dispersion of repolarization and suppresses early afterdepolarization activity in canine ventricular myocardium. *Circulation*, 98:I-141, 1998.
144. Zhang L, **Antzelevitch C**, Timothy KW, Vincent GM, Mason JW. Differential response of QT and QU stimulation in long QT patients with I_{Ks} defects. *J Am Coll Cardiol*, 33:138A, 1999.
145. Di Diego JM, **Antzelevitch C**. Beat-to-beat alternation of transmural dispersion of repolarization underlies ST-T wave alternans that develops during ischemia. *Pacing Clin Electrophysiol*, 22:II:251, 1999.
146. Burashnikov A, Eddlestone GT, Bauder J, Heilmann C, **Antzelevitch C**. Ability of epicardial, M and endocardial tissues and myocytes to develop action potential duration alternans under baseline and long QT conditions. *Pacing Clin Electrophysiol*, 22:II:808, 1999.
147. Dumaine R, Wu Y, **Antzelevitch C**. $KvLQT1$ but not $minK$ mRNA parallels the distribution of I_{Ks} in the canine heart. *Pacing Clin Electrophysiol*, 22:II:856, 1999.
148. Miyoshi S, **Antzelevitch C**. Cellular basis for QT dispersion in the arterially-perfused canine left ventricular wedge preparation. *Pacing Clin Electrophysiol*, 22:II:857, 1999.
149. Shimizu W, **Antzelevitch C**. Differential response of transmural dispersion of repolarization and Torsade de Pointes to β -adrenergic agonists and antagonists in LQT1, LQT2 and LQT3 models of the long QT syndrome. *Pacing Clin Electrophysiol*, 22:II:730, 1999.
150. Burashnikov A, **Antzelevitch C**. Temperature modulates the ability of I_{Kr} , I_{Ks} , and I_{Ca} blockers to change action potential duration in canine ventricular myocardium. *Pacing Clin Electrophysiol*, 22:II:858, 1999.
151. Burashnikov A, **Antzelevitch C**. Is the Purkinje system the source of the electrocardiographic U wave? *Circulation*, 100: I-841, 1999.
152. Dumaine R, Towbin JA, Brugada P, Vatta M, Brugada, Brugada R, **Antzelevitch C**. Ionic mechanisms responsible for the electrocardiographic phenotype of the Brugada syndrome are temperature dependent. *Circulation*, 100: I-496, 1999.
153. Shimizu W, **Antzelevitch C**. Spontaneous and stimulation-induced Torsade de Pointes in LQT1, LQT2 and LQT3 models of the long QT syndrome. *Circulation*, 100:I-769, 1999.
154. Thomas G, **Antzelevitch C**. Selective block of I_{Kr} underlies quinidine-induced Torsade de Pointes under low therapeutic concentrations. *Circulation*, 100:I-279, 1999.

155. Zygmunt AC, Goodrow RJ, **Antzelevitch C**. Sodium-calcium exchange current contributes to transmural electrical heterogeneity in dog ventricle. *Circulation*, 100: I-842, 1999.
156. Thomas GP, **Antzelevitch C**. Cytochrome P-450 inhibitor clotrimazole blocks transient outward and delayed rectifier potassium currents in canine ventricular myocytes. *Biophys J*, 2000.
157. **Antzelevitch C**, Shimizu W. The role of the M cell in ventricular tachyarrhythmias. *Cardiostim* 2000, 2000.
158. Burashnikov A, **Antzelevitch C**. Heterogeneous distribution of action potential duration in canine isolated perfused right atrium and its accentuation by acetylcholine. *Pacing Clin Electrophysiol*, 23 No. 4:II:729, 2000.
159. Burashnikov A, **Antzelevitch C**. Transmural distribution of spike and dome morphology of in the isolated arterially-perfused canine right atrium. *Pacing Clin Electrophysiol*, 23 No. 4:II:728, 2000.
160. Burashnikov A, Tribault D, **Antzelevitch C**. Hyperthermia-induced early afterdepolarizations and Torsade de Pointes under acquired and congenital long QT syndrome conditions. *Pacing Clin Electrophysiol*, 23 No. 4:II:662, 2000.
161. Emori T, **Antzelevitch C**. Cellular basis for complex T waves and extrasystolic activity in a model of combined acquired and congenital long QT syndrome. *Pacing Clin Electrophysiol*, 23 No. 4:II:615, 2000.
162. Kondo M, Nesterenko VV, **Antzelevitch C**. Cellular basis for the Hump morphologies obtained with monophasic action potential recording techniques. *Pacing Clin Electrophysiol*, 23 No. 4:II:729, 2000.
163. Ramakers C, Doevendans P, Vos MA, **Antzelevitch C**, Dumaine R. KCNQ1 and KCNE1 expression is reduced in dogs with chronic AV block. *Biophys J*, 78:90A, 2000.
164. Dumaine R, Towbin JA, Brugada P, Vatta M, Nesterenko DV, Nesterenko VV, Brugada J, Brugada R, **Antzelevitch C**. Ionic mechanisms responsible for the electrocardiographic phenotype of the Brugada syndrome are temperature dependent. *Biophys J*, 78:90A, 2000.
165. **Antzelevitch C**. Transmural dispersion of repolarization as the basis for the Brugada and long QT syndromes. *Proceeding of the XXVII International Congress of Electrocardiology*, 2000.
166. **Antzelevitch C**. Ionic and cellular basis for specific syndromes of VT/VF. *Proceeding of 2000 future of Arrhythmology*, 2000.
167. **Antzelevitch C**, Yan G-X. Cellular and Ionic Mechanisms Responsible for the Brugada syndrome. *ISCE Proceedings*, 2000.

168. Burashnikov A, **Antzelevitch C**. Delayed afterdepolarization activity as the basis for acetylcholine-induced tachyarrhythmias recorded in arterially-perfused canine right atria. *Circulation*, 102: I-323, 2000.
169. Emori T, **Antzelevitch C**. Cellular basis for the effects of magnesium to protect against the development of Torsade de Pointes under drug-induced long QT conditions. *Circulation*, 102:II-338-339, 2000.
170. Kondo M, Nesterenko V, **Antzelevitch C**. Large intramural and Franz Monophasic action potential electrodes record apparent early afterdepolarization artifacts when placed in region of disparate repolarization. *Circulation*, 102:II-338, 2000.
171. Shimizu W, Noda T, Kurita T, Suyama K, Taguchi A, Aihara N, Kamakura S, **Antzelevitch C**. Differential sensitivity to sympathetic stimulation and genotype-specific therapy in the congenital long QT syndrome - observations from experimental and clinical studies. *Japanese Circulation Journal*, 2000.
172. Ramakers C, Dumaine R, Doevendans P, **Antzelevitch C**, Vos MA. Both KCNQ1 and KCNE1 expression is reduced in dogs with chronic AV block. *European Heart J*, 21:239, 2000.
173. Vos MA, van Opstal J, Verduyn SC, Leuissen j, Ramakers C, Doevendans P, Dumaine R, **Antzelevitch C**, Volders P, Spido K. Electrophysiological and molecular aspects of drug-induced Torsade de Pointes (TdP). *Br J Clin Pharmacol* p.27, July 15-20, 2000.
174. Burashnikov A, **Antzelevitch C**. Does DAD activity contribute to reinduction of atrial flutter or fibrillation immediately following termination of the arrhythmia. *Pacing Clin Electrophysiol*, 24:II-544 2001.
175. Burashnikov A, Winckels S, **Antzelevitch C**. Ito and IKur inhibition is superior to IKr or IKs block in preventing cholinergically-mediated atrial fibrillation. *Pacing Clin Electrophysiol*, 24:II-550, 2001.
176. Di Diego JM, Feiner JM, Moussallem CG, **Antzelevitch C**. Cellular basis for ischemia-induced ST-segment elevation. *Pacing Clin Electrophysiol*, 24:II-599, 2001.
177. Kondo M, Nesterenko VV, **Antzelevitch C**. Cellular basis for the monophasic action potential recording: which is the recording electrode. *Pacing Clin Electrophysiol*, 24:II-599, 2001.
178. Thomas GP, Vos MA, **Antzelevitch C**. The effect of volume overload hypertrophy on transmural distribution of the delayed rectifier (IKr and IKs) and transient outward (Ito) currents in the canine heart. *Pacing Clin Electrophysiol*, 24:II-597, 2001.
179. Kondo M, Harumi K, **Antzelevitch C**. Computer stimulation of the cellular basis for the electrocardiographic features of the Brugada syndrome. *Pacing Clin Electrophysiol*, 24:II-599, 2001.

180. Brugada J, Brugada R, **Antzelevitch C**, Towbin JA, Nademanee K, Brugada P. Arrhythmic events in patients with the electrocardiographic pattern of right bundle branch block and ST segment elevation in right precordial leads. *Pacing Clin Electrophysiol*, 24:II-557, 2001.
181. **Antzelevitch C**. Molecular biology and cellular mechanisms of cardiac arrhythmias and sudden death in infants (SIDS) and young children. ISCE Proceedings, April, 2001
182. **Antzelevitch C**. Cellular basis for the J, T, and U waves of the ECG: insights into the mechanisms underlying life-threatening ventricular arrhythmias. *Proceeding of the International Society of Electrocardiology*, 2001.
183. Kondo M, **Antzelevitch C**. Cellular basis for the monophasic action potential: which electrode is the recording electrode? *Japanese Circulation Society*, 2002.
184. Kondo M, **Antzelevitch C**. Computer simulation of the cellular basis for the ECG configurations of the Brugada syndrome and early repolarization syndrome. *Japanese Circulation Society*, 2002.
185. Kondo M, **Antzelevitch C**. Cellular basis for the Hump Morphology in repolarization phase of the monophasic action potential recordings. *Japanese Circulation Society*, 2002.
186. Burashnikov A, **Antzelevitch C**. Re-induction of atrial fibrillation immediately following termination of the arrhythmia is mediated by calcium-overload-induced triggered activity. *Pacing Clin Electrophysiol*, 25:II-535, 2002.
187. Mannava R, **Antzelevitch C**. Transmural dispersion of repolarization with dual ion channel impairment. *Pacing Clin Electrophysiol*, 25:II-, 627, 2002.
188. Zygmunt AC, **Antzelevitch C**. A prominent nickel-sensitive T-type calcium channel is present in neonates, but not in adult dogs. *Pacing Clin Electrophysiol*, 25:II-603, 2002.
189. Zygmunt AC, Thomas GP, Belardinelli L, Blackburn B, **Antzelevitch C**. Ranolazine produces ion channel effects similar to those observed with chronic amiodarone in canine cardiac ventricular myocytes. *Pacing Clin Electrophysiol*, 25:II-626, 2002.
190. **Antzelevitch C**. Cellular and ionic mechanisms responsible for the Brugada syndrome. *Proceedings of Japan-Canada Conference on Arrhythmias - Satellite of XXIXth International Congress of Electrocardiology*, 2002.
191. Fish JM, **Antzelevitch C**. Terfenadine-induced ST segment elevation and the Brugada syndrome. *J Mol Cell Cardiol*, 34:A17, 2002.
192. Fish JM, Di Diego, JM, Zygmunt AC, **Antzelevitch C**. Cellular and ionic basis for the sex-related difference in the manifestation of the Brugada phenotype and progressive conduction defects. *Circulation*, II-153:771, 2002.

193. Di Diego JM, Cordeiro JM, Goodrow RJ, Fish JM, Zygmunt AC, Pérez GJ, Scornik FS, **Antzelevitch C**. Ionic and cellular basis for the predominance of the Brugada syndrome phenotype in males. *Circulation*, 106:II-21, 2002.
194. Fish JM, Di Diego JM, Cordeiro JM, Goodrow RJ, **Antzelevitch C**. Cellular and ionic basis for the sex-related difference in the manifestation of the Brugada phenotype and progressive conduction defects. Upstate New York Cardiac Electrophysiological Society. Buffalo, NY, 2002. Young Investigator Award.
195. Hong K, Vatta M, Pongvarin N, Oliva A, Berruero A, Piñero C, Brugada J, Towbin JA, Dumaine R, Brugada P, **Antzelevitch C**, Brugada R. SUDS and Brugada Syndrome linked by the same SCN5A mutation. *Circulation*, 106:II-61, 2002.
196. Burashnikov E, Wu YS, Thomas GP, **Antzelevitch C**, Dumaine R. Effects of KCNE2 mutation I57T on the HERG/KCNE2 (I_{Kr}) current. *Biophys J*, 2002.
197. Cordeiro JM, Greene L, **Antzelevitch C**. Time course of Ca²⁺ transient and SR Ca²⁺ content differ among epicardial, midmyocardial and endocardial cells from canine left ventricle. *Biophys J*, 84:216a, 2003.
198. Fish JM, **Antzelevitch C**. Cellular and ionic basis for the sex-related difference in the manifestation of the Brugada phenotype and progressive conduction defects. ISCE, 2003.
199. Burashnikov A, **Antzelevitch C**. Cellular electrical restitution during atrial fibrillation in the isolated canine right atria. *Pacing Clin Electrophysiol*, 26:II-1108, 2003.
200. Cordeiro JM, Zygmunt AC, Dumaine R, Goodrow R, **Antzelevitch C**. Repolarizing currents in canine neonate ventricular myocytes. *Pacing Clin Electrophysiol*, 26:II-1086, 2003.
201. Fish JM, Di Diego JM, Tsuboi M, **Antzelevitch C**. Epicardial stimulation prolongs QT interval and amplifies transmural dispersion of repolarization in the arterially perfused canine left ventricular wedge. *Pacing Clin Electrophysiol*, 26:II-1086, 2003.
202. Di Diego JM, **Antzelevitch C**. Electrophysiologic basis for ischemia-induced ST segment elevation. *Pacing Clin Electrophysiol*, 26:II-1043, 2003.
203. Tsuboi M, **Antzelevitch C**. Cellular basis for the electrocardiographic and arrhythmogenic characteristics of the LQT7 form of the Long QT Syndrome. *Pacing Clin Electrophysiol*, 26:II-956, 2003.
204. Tsuboi M, **Antzelevitch C**. Non-invasive index of transmural dispersion of repolarization from the ECG. *Pacing Clin Electrophysiol*, 26:II-958, 2003.
205. Song Y, Wu L, Shryock JC, Li Y, **Antzelevitch C**, Belardinelli L. Sodium channel dysfunction predisposes cardiac myocytes to potassium channel blocker-induced early afterdepolarizations. *Pacing Clin Electrophysiol*, 26:II-993, 2003.

206. Wu L, Song Y, Shryock JC, Li Y, **Antzelevitch C**, Belardinelli L. Ranolazine attenuates the prolongation of ventricular monophasic action potential and suppresses ventricular tachycardia caused by sea anemone toxin, ATX-II, in guinea pig isolated hearts. *Pacing Clin Electrophysiol*, 26:II-1023, 2003.
207. Song Y, Wu L, Shryock JC, **Antzelevitch D**, Belardinelli L. Ranolazine suppresses early afterdepolarizations and terminates ventricular tachycardia in a model of long QT3 syndrome. *Pacing Clin Electrophysiol*, 26:II-993, 2003.
208. Mannava RK, **Antzelevitch C**. Rate and sympathetic modulation of arrhythmogenicity with dual ion channel impairment. *Pacing Clin Electrophysiol*, 26:II-1045, 2003.
209. Medina-Ravell VA, Yan GX, Lankipalli RS, **Antzelevitch C**, Median-Malpica NA, Medina-Malpica OA, Droogan C, Kowey PR. Pacing-site dependent increase in QT interval and transmural dispersion of repolarization: a potential risk in the development of Torsade de Pointes in resynchronization therapy. *Pacing Clin Electrophysiol*, 26:II-S47, 2003.
210. Kondo M, **Antzelevitch C**. Tstsumi T, Takeyama Y, Harumi K. Contribution of conduction delay within the right ventricular outflow tract or bundle branch to arrhythmogenesis in the Brugada syndrome. A 3-D computer simulation study. *Int J Bioelectromagnetism*, 5:267, 2003.
211. Brugada R, Hong K, Dumaine R, Cordeiro JM, Gaita F, Borggrefe M, Menendez TM, Brugada J, Pollevick G, Wolpert C, Burashnikov E, Matsuo K, Wu YS, Guerchicoff A, Bianchi F, Giustetto C, Schimpf R, Brugada P, **Antzelevitch C**. Mutations in HERG associated with sudden death in the short QT syndrome. *Circulation*, 108:IV-34, 2003.
212. Hong K, Dumaine R, Cordeiro C, Gaita F, Borggrefe M, Brugada J, Pollevick G, Wolpert C, Burashnikov E, Matsuo K, Wu YS, Guerchicoff A, Bianchi F, Giustetto C, Schimpf R, Brugada P, **Antzelevitch C**, Brugada R. Genetic and biophysical basis for sudden death in the short QT syndrome. *J Am Col Cardiol*, 43:121A-122A, 2004.
213. Cordeiro JM, Dumaine R, Brugada R, Hong K, Borggrefe M, Gaita F, **Antzelevitch C**. Mutation N588K in HERG underlies the short QT syndrome and renders IKr resistant to Class III antiarrhythmic agents. *Heart Rhythm*, 1:S92, 2004.
214. Cordeiro JM, Gaetano WS, Greene L, **Antzelevitch C**. Electrical and mechanical transmural heterogeneity serves to synchronize contraction across the canine left ventricular wall. *Heart Rhythm*, 1:S125, 2004.
215. Fish JM, Extramiana F, **Antzelevitch C**. Tedisamil prevents Brugada syndrome in the canine right ventricular wedge. *Heart Rhythm*, 1:S158, 2004.
216. Fish JM, **Antzelevitch C**. Cellular mechanism and arrhythmogenic potential of T wave alternans in the Brugada syndrome. *Heart Rhythm* 1:S255, 2004.

217. Extramiana F, **Antzelevitch C**. Transmural electrophysiological heterogeneities underlying arrhythmogenesis associated with a short QT interval. *Heart Rhythm*, 1:S158, 2004.
218. Nam GB, Burashnikov A, **Antzelevitch C**. Cellular mechanisms underlying the development of catecholaminergic ventricular tachycardia. *Heart Rhythm*, 1:S188, 2004.
219. **Antzelevitch C**, Di Diego JM, Fish JM. Brugada syndrome and ischemia-induced ST segment elevation. similarities and differences. *Proceedings of the 31st International Congress on Electrocardiology*, 2004.
220. **Antzelevitch C**. Clinical, molecular, genetic and cellular aspects of the Brugada syndrome. *Proceedings of the 31st International Congress on Electrocardiology*, S2-1, 2004.
221. Hu D, Oliva A, Cordeiro JM, Brugada R, Hong K, Sicouri S, Barajas-Martínez H, Wu YS, Burashnikov E, Viskin S, Dumaine R, **Antzelevitch C**. A novel mutation in the SCN5A gene associated with arrhythmic storm developing post-myocardial infarction. *Circulation*, 112:II-90, 2005.
222. Cordeiro JM, Hong K, Barajas-Martínez H, Dumaine R, Burashnikov E, Oliva A, Wu YS, Orsino AM, Pfeiffer R, Hu D, Brugada J, **Antzelevitch C**, Brugada R. A SCN5A double mutant P336L/11660V results in different phenotype expressions in a Brugada syndrome family. *Circulation*, 112:II-90, 2005.
223. Zhang L, Timothy KW, **Antzelevitch C**, Sicouri S, Vincent GM. Cardiac L-type channel mutations caused the longest QT interval compared to the common genotypes of long QT syndrome. *Circulation*, 112:II-701, 2005.
224. Aizawa Y, Mitsuma W, Komura S, Chinushi M, Hiraoka M, **Antzelevitch C**. Human cardiac ryanodine receptor mutations in ion channel disorders in Japan. *Circulation*, 112:II-96.
225. Glass A, Sicouri S, **Antzelevitch C**. The arterially-perfused ventricular septal preparation as a new model to assess the arrhythmogenic potential of drugs. *Upstate New York Cardiac Electrophysiology Society*, 2005.
226. Hu D, Oliva A, Cordeiro JM, Brugada R, Hong K, Sicouri S, Barajas-Martinez H, Wu YS, Burashnikov E, Viskin S, Dumaine R, **Antzelevitch C**. A novel mutation in the SCN5A gene associated with arrhythmic storm developing Post-MI. *Upstate New York Cardiac Electrophysiology Society*, 2005.
227. Borggreffe M., Wolpert C, **Antzelevitch C**, Veltmann C, Giustetto C, Faita F, Schimpf R. Short QT syndrome Genotype-phenotype correlations. *J Electrocardiol*, 38:75, 2005.
228. Zhang Li, Timothy KW, **Antzelevitch C**, Sicouri S, Keating MT, Vincent GM. Electrocardiographic differences between Timothy syndrome and LQT3 children. *Heart Rhythm*, 2:S222, 2005.

229. Sicouri S, Zhang L, Timothy KW, Vincent GM, Belardinelli L, **Antzelevitch C**. Cellular Basis for the Electrocardiographic and arrhythmic manifestation of Timothy syndrome. *Heart Rhythm*, 2:S141, 2005.
230. Barajas-Martínez H, Hu D, Brugada R, Cordeiro JM, Wu Y, Kovacs R, Meltser H, Hong K, Burashnikov E, **Antzelevitch C**, Dumaine R. Lidocaine-induced Brugada syndrome phenotype linked to a novel double mutation in the cardiac sodium channel. *Heart Rhythm*, 2:S294, 2005.
231. Vernooy K, Sicouri S, Dumaine R, Hong K, Oliva A, Burashnikov E, Timmermans C, Delhaas T, Crijns HJ, **Antzelevitch C**, Rodriguez L, Brugada R. Genetic and biophysical basis for bupivacaine-induced ST segment elevation and VT/VF. Anesthesia-mediated acquired Brugada syndrome. *Heart Rhythm*, 2:S49, 2005.
232. Fish JM, Di Diego JM, Belardinelli L, **Antzelevitch C**. Moxifloxacin-induced Torsade de Pointes in an experimental model of Long QT Syndrome. *Heart Rhythm*, 2:S108, 2005.
233. Burashnikov A, **Antzelevitch C**. Beta-adrenergic stimulation is highly arrhythmogenic following ischemia/reperfusion injury in the isolated canine right atrium. *Heart Rhythm*, 2:S179, 2005.
234. Di Diego JM, Fish JM, **Antzelevitch C**. Brugada syndrome and ischemia-induced ST segment elevation: similarities and differences. ISCE, 2005.
235. Malone JE, Cordeiro JM, Aistrup GL, Scornik FS, **Antzelevitch C**, Wasserstrom JA. Identification of cellular and subcellular alternans by confocal microscopy in the canine left ventricle. *Biophys J*, 90:2702, 2006.
236. Sangenis P, Vitagliano L, Boscatto V, Barral P, Sicouri S. Evaluacion de riesgo a 10 anos por scor de framingham en una población de sexo femenino que consulta para chequeo medico previo a la realización de actividad fisica. *Rev. Arg. Cardiol*, 2006.
237. Burashnikov A, **Antzelevitch C**. β -adrenergic stimulation is highly arrhythmogenic following ischemia/reperfusion injury in the isolated canine right atrium. *Heart Rhythm*, 2:S179, 2005.
238. Fish JM, Welchons DR, Kim Y-S, Lee S-H, Ho W-K, **Antzelevitch C**. dmLSB, an extract of *Salvia miltiorrhiza*, as a potential therapy for Brugada syndrome. *Heart Rhythm*, 3:S262, 2006.
239. Hu D, Cordeiro JM, Brugada R, Pfeiffer R, Guerchicoff A, Pollevick GD, **Antzelevitch C**. Trafficking problems associated with a novel mutation (P1008S) in the human SCN5A gene contribute to the development of cardiac conduction defects. *Heart Rhythm*, 3:S218-219, 2006.
240. Guerchicoff A, Pollevick GD, Cordeiro JM, Dumaine R, Mazza M, **Antzelevitch C**, Di Diego JM. Transmural differences in expression of SCN5A may contribute to the greater

- sensitivity of ventricular epicardium to electrical depression. *Heart Rhythm*, 3:S302, 2006.
241. Burashnikov A, Di Diego J, Belardinelli L, **Antzelevitch C**. Ranolazine suppresses atrial fibrillation by exerting a marked use-dependent block of sodium channel current in canine atrium but not ventricle. *Heart Rhythm*, 3:S304, 2006.
242. **Antzelevitch C**. Overview of the Brugada syndrome. *Proceedings of the Japanese Circulation Society, Circulation*, 70:12, 2006.
243. Aizawa Y, Ravin JS, Pollevick GD, Hofman-Bang J, Cordeiro JM, Guerchicoff A, Jensen G, Wu YS, Burashnikov E, Haunso S, Svendsen JH, Christiansen M, **Antzelevitch C**. Gain of function in IKs secondary to a mutation in KCNE5 as a cause of atrial fibrillation. *Circulation*, 114:II-722, 2006.
244. Pollevick GD, Schimpf R, Aizawa Y, Pfeiffer R, Guerchicoff A, Cordeiro JM, Wolpert C, Veltmann C, Hsu L, Wollnik B, Haissaguerre M, Borggrefe M, **Antzelevitch C**. Loss of function in calcium channel activity secondary to a mutation in CACNB2b modulates the clinical manifestation of a combined Brugada syndrome-short QT phenotype. *Circulation*, 114:II-193, 2006.
245. Aizawa Y, Ueda K, Cordeiro JM, Scornik F, Wu YS, Guerchicoff A, Nagata Y, Iesaka Y, Aizawa Y, Kimura A, Hiraoka M, **Antzelevitch C**. A single amino acid deletion in KCNQ1 associated with a potent dominant negative effect as a cause of long QT syndrome. *Circulation*, 114:II-193, 2006.
246. **Antzelevitch C**, Pollevick GD, Cordeiro JM, Casis O, Sanguinetti MC, Aizawa Y, Guerchicoff A, Pfeiffer R, Oliva A, Wollnik B, Gelber P, Bonaros EP, Burashnikov E, Wu YS, Sargent JD, Schickel S, Oberheiden R, Bhatia A, Hsu LF, Haissaguerre M, Schimpf R, Borggrefe M, Wolpert C. Loss of function mutations in the cardiac calcium channel underlie a new clinical entity characterized by ST segment elevation, short QT intervals and sudden cardiac death. *Cir Res*, 99:1279, 2006.
247. Hu D, Cordeiro JM, Pfeiffer R, Guerchicoff A, Wu Y, Burashnikov E, Pollevick G, **Antzelevitch C**. Trafficking problems associated with a novel mutation (P1008S) in the human SCN5A gene contribute to the development of cardiac conduction defects. Combined 2006 annual meeting of the Upstate New York Cardiac Electrophysiology Society and Upper Canada Electrophysiological Society, Toronto, Canada, 2006.
248. Aizawa Y, Pollevick GD, Cordeiro JM, Sanguinetti MC, Guerchicoff A, Pfeiffer R, Burashnikov E, Haissaguerre M, Wu YS, Borggrefe M, **Antzelevitch C**. Loss of function mutations in the cardiac calcium channel underlie a new clinical entity characterized by ST segment elevation, short QT intervals and sudden cardiac death. Combined 2006 annual meeting of the Upstate New York Cardiac Electrophysiology Society and Upper Canada Electrophysiological Society, Toronto, Canada, 2006.

249. Barajas-Martinez H, Cordeiro JM, Hong K, Hu D, Burashnikov E, Pfeiffer R, Orsino AM, Wu YS, Brugada J, Brugada P, Brugada R, **Antzelevitch C**, Dumaine R. Compound heterozygous mutations P336L and I1660V in the human cardiac sodium channel associated with the Brugada Syndrome. Upstate NY Cardiac Electrophysiology Society meeting, Toronto, Canada, 2006.
250. Wu L, Li H, Shryock JC, **Antzelevitch C**, Belardinelli L. Predictors of Quinidine-induced Torsade de Pointes: Role of late sodium current. European Society of Cardiology (ESC) Congress 2006/ XVth World Congress of Cardiology, European Heart J, 263, 2006.
251. Wu L, Li H, Shryock JC, **Antzelevitch C**, Belardinelli L. Augmentation of late sodium current unmasks the proarrhythmic effects of amiodarone in an experimental model. European Society of Cardiology (ESC) Congress 2006/ XVth World Congress of Cardiology, European Heart J, 489, 2006.
252. Glass A, Sicouri S, **Antzelevitch C**. Spatial dispersion of repolarization within the interventricular septum and its amplification under long QT conditions. ISCE 2007, 2007.
253. Burashnikov A, **Antzelevitch C**. IKur block promotes atrial fibrillation in “healthy” canine atria. Heart Rhythm, 4:S112, 2007.
254. Burashnikov A, Belardinelli L, **Antzelevitch C**. Ranolazine and propafenone both suppress atrial fibrillation but ranolazine unlike propafenone does it without prominent effects on ventricular myocardium. Heart Rhythm, 4:S163, 2007.
255. Pollevick GD, Guerchicoff A, Carrier T, Kanter R, **Antzelevitch C**. Compound heterozygous mutations in KCNJ2 and SCN5A associated with life-threatening ventricular tachycardia in the absence of long QT or clinical manifestations of Andersen-Tawil syndrome. Heart Rhythm, 4:S189, 2007.
256. Pollevick GD, Oliva A, Viskin S, Carrier T, Guerchicoff A, **Antzelevitch C**. Genetic predisposition to post-myocardial infarction long QT intervals and Torsade de Pointes. Heart Rhythm, 4:S121, 2007.
257. Sicouri S, Glass A, Pedulla A, Belardinelli L, **Antzelevitch C**. Antiarrhythmic Effects of ranolazine in canine pulmonary vein sleeves, Heart Rhythm, 4:S166, 2007.
258. Glass A, Sicouri S, **Antzelevitch C**. Trans-septal dispersion of repolarization and its role in the development of Torsade de Pointes arrhythmias. YIA competition Heart Rhythm, 4:S162, 2007.
259. Hu D, Zygmunt A, Burashnikov A, Wu Y, Belardinelli L, Guerchicoff A, **Antzelevitch C**. Sodium channels of canine atrial and ventricular cells differ with respect to voltage dependence of inactivation. Heart Rhythm, 4:S148, 2007.

260. Schimpf R, **Antzelevitch C**, Hsu LF, Schickel S, Pollevick G, Cordeiro JM, Haissaguerre M, Veltmann C, Borggrefe M, Wolpert C. The QT-interval in patients with a Brugada syndrome: is a shortening of the QT-time an existing and relevant ECG-pattern? *Heart Rhythm*, 4:S188, 2007.
261. Barajas-Martínez H, Hu D, Cordeiro JM, Wu YS, Kovacs R, Meltser H, Hong K, Burashnikov E, Brugada R, **Antzelevitch C**, Dumaine R. Lidocaine-induced Brugada syndrome phenotype linked to a novel mutation and polymorphism in the cardiac sodium channel. Proceedings of the Upstate New York Cardiac Electrophysiology Society Meeting, Rochester, New York, 2007.
262. Hu D, Zygmunt A, Burashnikov A, Wu Y, Belardinelli L, Guerchicoff A, **Antzelevitch C**. "Sodium channels of canine atrial and ventricular cells differ with respect to voltage dependence of inactivation". Proceedings of the Upstate New York Cardiac Electrophysiology Society Meeting, Rochester, New York, 2007.
263. Burashnikov A, **Antzelevitch C**, Di Diego JM, Zygmunt A, Belardinelli L, Antzelevitch C. Atrial-selective sodium channel block as a strategy for suppression of atrial fibrillation. ISHNE AF World-Wide Internet Symposium, 2007.
264. Sicouri S, Glass A, Carlsson L, **Antzelevitch C**. Electrophysiologic and antiarrhythmic effects of AZD1305 in canine pulmonary vein sleeves. *Heart Rhythm* 2008, 5:S163, 2008.
265. Nof E, Burashnikov A, **Antzelevitch C**. Abbreviated effective refractory period and amplified dispersion of repolarization underlie the development of atrial fibrillation in a canine atrial wedge model of short QT-1. *Heart Rhythm*, 5:S213, 2008.
266. Thomsen PEB, Hagemann A, Jons C, Jansen TF, Christiansen LK, Soegaard P, **Antzelevitch C**. Local potentials, conduction impairment and ventricular ectopy originating in the right ventricular outflow tract. *Heart Rhythm*, 5:S327, 2008.
267. Renodin DM, Murphy L, **Antzelevitch C**, Di Diego JM, Cordeiro JM. Ischemic conditions cause a differential depression of sodium current in the canine left ventricle. *Biophys J*, 94(suppl):B322, 2008.
268. Glass A, Sicouri S, **Antzelevitch C**. Spatial dispersion of repolarization within the interventricular septum and its amplification under long QT conditions. *J Electrocardiol*, 2008.
269. Burashnikov A, Di Diego JM, Sicouri S, Carlsson L, **Antzelevitch C**. Chronic amiodarone exerts much greater inhibition of sodium and potassium channel activity in canine atria vs. ventricles. *J Cardiovasc Electrophysiol*, 2008.
270. Oliva A, Hu D, Viskin S, Cordeiro JM, Carrier T, Barajas-Martinez B, Wu YS, Burashnikov E, Sicouri S, Brugada R, Rosso R, Guerchicoff A, Pollevick GD, **Antzelevitch C**. SCN5A gene mutation associated with acute myocardial infarction. *AAFS*, 14:258, 2008.

271. Jesty SA, Kornreich BG, Cordeiro JM, **Antzelevitch C**, Moïse NS. Cardiomyocyte calcium transients in German shepherd dogs with inherited ventricular arrhythmias. Veterinary Research Day, Cornell University, 2008.
272. Antzelevitch C., Burashnikov A. Use of atrial-selective sodium channel blockers in the management of atrial fibrillation. Proceedings of Japanese Heart Rhythm Society 2008.
273. Cordeiro JM, Marieb M, Pfeiffer R, Calloe K, Burashnikov E, **Antzelevitch C**. Accelerated inactivation of the L-type calcium channel due to a mutation in CACNB2b underlies the development of a Brugada ECG phenotype. *Circulation*, 118:S884, 2008.
274. Barajas-Martinez H, Hu D, Pfeiffer R, Guerchicoff A, Cordeiro JM, Curtis AB, Pollevick GD, Wu YS, Burashnikov E, **Antzelevitch C**. Dual Variations in SCN5A and CACNB2b underlie cardiac conduction disease without Brugada syndrome. Upstate New York Cardiac Electrophysiology Society, Buffalo, New York, USA, 2008.
275. Barajas-Martinez HM, Hu D, Burashnikov E, **Antzelevitch C**. Novel mutation in the KCNQ1 associated with Brugada syndrome. *Circulation*, 118 (suppl 2): S332, 2008.
276. Zygmunt AC, Nesterenko VV, Rajamani S, Hu D, Barajas-Martínez H, Belardinelli L, **Antzelevitch C**. Mechanism of the preferential block of the atrial sodium current by ranolazine. *Biophys J*, 96(3s):250a. Abstract 1278-Pos, 2009.
277. Barajas-Martínez H, Hu D, Ontiveros G, Caceres G, Burashnikov E, Scaglione J, **Antzelevitch C**. Biophysical characterization of a novel KCNJ2 mutation associated with Andersen-Tawil syndrome and CPVT mimicry. *Biophys J*, 96(3s):260a. Abstract 1333-Pos, 2009.
278. Hu D, Barajas-Martínez H, Pfeiffer R, Guerchicoff A, Cordeiro JM, Curtis AB, Pollevick GD, Wu Y, Burashnikov E, **Antzelevitch C**. Dual variations in SCN5A and CACNB2b underlie cardiac conduction disease without Brugada syndrome. *Biophys J*, 96(3s):261a. Abstract 1335-Pos, 2009.
279. Calloe K, Jespersen T, Lundby A, **Antzelevitch C**, Olesen SP, Cordeiro JM. Differential effects of the transient outward K⁺ current activator NS5806 in the canine left ventricle. *Biophys J*, 96(3s):659a. Abstract 3401-Pos, 2009.
280. Lundby A, Jespersen T, Schmitt N, Grunnet M, Olesen SP, Cordeiro JM, Calloe K. The effect of the Ito activator NS5806 on cloned Kv4.3 channels is dependent on the accessory protein KChIP2. *Biophys J*, 96(3s):659a. Abstract 3402-Pos, 2009.
281. Calloe K, Cordeiro JM, Di Diego JM, Hansen RS, Grunnet M, Olesen SP, Antzelevitch C. NS5806 activates the transient outward potassium current in the canine ventricle and provides a new model of the Brugada syndrome. *Biophys J*, 96(3s):666a. Abstract 3438-Pos, 2009.
282. Sicouri S, Talarico M, **Antzelevitch C**. Antiarrhythmic effects of losartan and enalapril in canine pulmonary vein sleeves. *Heart Rhythm*. 6(5S):S91. Abstract AB42-4, 2009.

283. Burashnikov A, Barajas-Martinez H, Hu D, Nof E, Blazek J, **Antzelevitch C**. The atrial-selective potassium channel blocker AVE0118 prolongs effective refractory period in canine atria by inhibiting sodium channels. *Heart Rhythm*. 6(5S):S98. Abstract PO01-11, 2009.
392. Nof E, Belhassen B, Arad M, Bhuiyan ZA, **Antzelevitch C**, Rosso R, Fogelman R, Luria D, Eli-Ani D, Viskin S, Eldar M, A.M Wilde AAM, Glikson M. Post pacing abnormal repolarization in a CPVT family associated with a RYR2 mutation. *Heart Rhythm*. 6(5S):S101-S102. Abstract PO01-20, 2009.
393. Oliva A, Hu D, Viskin S, Carrier T, Cordeiro JM, Barajas-Martinez H, Wu Y, Burashnikov E, Brugada R, Rosso R, Guerchicoff A, Pollevick G, Pascali VL, **Antzelevitch C**. SCN5A Mutation associated with acute myocardial infarction. *Legal Medicine Symposium*, 2009.
284. Veltmann C, Schimpf R, Kuschyk J, Streitner F, Pfeiffer R, Hu D, Borggreffe M, Wolpert C, **Antzelevitch C**. Outcome and follow-up of a family with a highly malignant SCN5A mutation. *Heart Rhythm*. 6(5S):S179-S180. Abstract PO02-112, 2009.
285. Hu D, Barajas-Martinez H, Burashnikov E, Springer M, Wu Y, Pfeiffer R, Guerchicoff A, Pollevick GD, **Antzelevitch C**. A mutation in the $\beta 3$ subunit of the cardiac sodium channel associated with Brugada ECG phenotype. *Heart Rhythm*. 6(5S):S204-S205. Abstract PO03-6, 2009.
286. Nof E, Laish-Farkash A, Marek D, Pras E, Eldar M, **Antzelevitch C**, Glikson M, Luria D. Triple mutation of SCN5A associated with sinus bradycardia and conduction disease. *Heart Rhythm*. 6(5S):S205. Abstract PO03-7, 2009.
287. Kapplinger JD, Wilde AAM, **Antzelevitch C**, Benito B, Berthet M, Brugada J, Brugada P, Fressart V, Guerchicoff A, Guicheney P, Kamakura S, Koopmann TT, Miyamoto M, Pollevick GD, Pfeiffer R, Probst V, Salisbury BA, Schulze-Bahr E, Shimizu W, Towbin JA, Vatta M, Zumhagen S, Schott J, Brugada R, Ackerman MJ. A worldwide compendium of putative Brugada syndrome associated mutations in the SCN5A encoded cardiac sodium channel. *Heart Rhythm*. 6(5S):S392-S393. Abstract PO06-6, 2009.
288. Jons C, Sogaard P, Johannesen A, Hansen TF, **Antzelevitch C**, Bloch Thomsen PE. Conduction impairment and reduced contractility are prerequisites for RVOT ectopy. *Heart Rhythm*. 6(5S):S427. Abstract PO06-101, 2009.
289. Veltmann V, Schimpf R, Streitner F, Kuschyk J, Pfeiffer R, Borggreffe M, Hu D, Wolpert C, **Antzelevitch C**. Phenotypic characterization of a large European family with overlapping syndromes due to an SCN5A mutation. *Heart Rhythm*. 6(5S):S432. Abstract PO06-114, 2009.
290. Burashnikov A, Di Diego JM, Linhardt G, Carlsson L, Antzelevitch C. AZD1305 has atrial-predominant electrophysiologic actions and is effective in suppressing atrial fibrillation in the dog. *Heart Rhythm*, 6(11):1685, 2009.

291. Burashnikov E, Pfeiffer R, Borggrefe M, Eldar M, Glikson M, Haissaguerre M, Kanter R, Laino R, Marieb M, Nadamane K, Nam GB, Robles R, Schimpf R, Stapleton D, Viskin S, Winters S, Wolpert C, Zimmern S, **Antzelevitch C**. Mutations in the cardiac L-type calcium channel associated with inherited sudden cardiac death syndromes. *Circulation*, 120:S573, 2009. Abstract 1929.
292. Burashnikov A, Di Diego JM, Linhardt G, Carlsson L, **Antzelevitch C**. AZD1305 has atrial-predominant electrophysiological actions and is effective in suppressing atrial fibrillation in the dog. Upstate New York Cardiac Electrophysiology Society, Ithaca, New York, USA, 2009.
293. Cordeiro JM, Perez GJ, Pfeiffer R, Burashnikov E, Borggrefe M, Wolpert C, Schimpf R, **Antzelevitch C**. Overlapping LQT1 and LQT2 phenotype in a patient with long QT syndrome associated with loss-of-function variations in KCNQ1 and KCNH2. *Biophys J*. 2010;98:116a. Abstract 608-Pos/B489
294. Schmitt N, Calloe K, Veltmann C, Pfeiffer R, Borggrefe M, Wolpert C, Schimpf R, Cordeiro JM, **Antzelevitch C**. Mutation in Nav1.5 associated with Brugada syndrome - a mutational hotspot? *Biophys J*. 2010;98:311a. Abstract 1619-Pos/B417
295. Calloe K, Chlus N, Nof E, Jespersen T, Olesen SP, **Antzelevitch C**, Cordeiro JM. Comparison of the effects of the transient outward potassium channel activator NS5806 on canine atrial and ventricular cardiomyocytes. *Biophys J*. 2010;98:334a. Abstract 1737-Pos/B535
296. Thomsen PEB, Johannessen A, Jons C, Kantwes JK, Saermark K, Antzelevitch C, Sogaard P. Local voltage potentials are prerequisites for outflow tract ectopy. *J Am Coll Cardiol*. 2010;55:A11. Abstract 1190-140
297. Kanter RJ, Agee C, Warsy I, Carboni M, Antzelevitch C. Infant Brugada syndrome presenting as rapid ventricular tachycardia. *Heart Rhythm*. 2010;7:S49. AB24-2
298. Hu D, Barajas-Martinez H, Burashnikov E, Pfeiffer R, Schimpf R, Wolpert C, Borggrefe M, **Antzelevitch C**. A novel mutation in SCN1Bb linked to Brugada syndrome by modulating Nav1.5 and Kv4.3 current. *Heart Rhythm*. 2010;7:S320. PO5-05
299. Calloe K, Lundby A, Jespersen T, Chlus N, Nof E, Schmitt N, Grunnet M, Di Diego JM, **Antzelevitch C**, Olesen SP, Cordeiro JM. The transient outward potassium channel activator NS5806 exerts differential effect in canine atrial and ventricular cells. *Acta Physiologica Scand*. 2010;198:47-48. Abstract P-Sun-6
300. Minoura Y, Di Diego JM, Barajas-Martinez H, Zygmunt AC, Hu D, Antzelevitch C. Cellular mechanisms underlying the effects of antidepressants to unmask the Brugada syndrome. *Circulation*, submitted, 2010.
301. Barajas-Martinez H, Hu D, Burashnikov E, Pfeiffer R, Caceres G, Veltmann C, Schimpf R, Borggrefe M, Wolpert C, Kanter R, Häissaguerre M, Antzelevitch C. A hotspot in

- CACNB2b is associated with J wave syndromes secondary to a loss of function of L-type calcium channel current. *Circulation*, submitted, 2010.
302. Barajas-Martinez H, Hu D, Burashnikov E, Pfeiffer R, Kanter R, Antzelevitch C. A novel mutation (D538E) in CACNB2b associated with infant Brugada syndrome. *Circulation*, submitted, 2010.
303. Barajas-Martinez H, Hu D, Ferrer T, Onetti C, Wu YS, Burashnikov E, Boyle M, Urrutia J, Borggreffe M, Wolpert C, Ibrahim B, Sanchez-Chapula JA, Winters S, Häissaguerre M, Antzelevitch C. Molecular genomic and functional association of Brugada and early repolarization syndromes with S422L missense mutation in KCNJ8. *Circulation*, submitted, 2010.
304. Burashnikov A, Reddy AS, Antzelevitch C. Atrioventricular differences in the generation of arrhythmias under long QT conditions. *Circulation*, submitted, 2010.
305. Hu D, Barajas-Martinez H, Terzic A, Borggreffe M, Veltmann C, Schimpf R, DiDiego JM, Burashnikov E, Pfeiffer R, Lopez-Izquierdo A, Ponce-Balbuena D, Wolpert C, Sanchez-Chapula JA, Antzelevitch C. Compound mutations in ABCC9 and SCN5A associated with a malignant form of overlap syndrome: Brugada, long QT and early repolarization syndromes.
306. Hu D, Barajas-Martinez H, Pfeiffer R, Burashnikov E, Caceres G, Antzelevitch C. The Role of SCN5A Mutations in J Wave Syndromes. *Circulation*, submitted, 2010.
307. Burashnikov A, Sicouri S, Di Diego JM, Belardinelli L, Antzelevitch C. Synergistic effect of the combination of dronedarone and ranolazine to suppress atrial fibrillation. *Circulation*, submitted, 2010. *Circulation*, submitted, 2010.
308. Crotti L, Hu D, Barajas-Martinez H, Pollevick GD, Oliva A, Guerchicoff A, Insolia R, De Ferrari G, Dagrada F, Schwartz PJ, Viskin S, Antzelevitch C. KCNH2-K897T Polymorphism Increases the Risk of Life-threatening Arrhythmias Following Acute Myocardial Infarction. *Circulation*, submitted, 2010
- 309.
- 310.