

PERSONAL INFORMATION **Xavier Bosch**

WORK EXPERIENCE

- January 1985-December 1992 **Medical Specialist**
Hospital Clinic, Barcelona (Spain)
Cardiology Department
- January 1993-December 1997 **Senior Specialist**
Hospital Clinic, Barcelona (Spain)
Senior Specialist. Coronary Care Unit and Intermediate Care Unit. Cardiology Department.
- January 1998-December 2002 **Consultant**
Hospital Clinic, Barcelona (Spain)
Coronary Care Unit and Intermediate Care Unit. Cardiology Department.
- January 2003-December 2005 **Senior Consultant**
Hospital Clinic, Barcelona (Spain)
Coronary Care Unit and Intermediate Care Unit, Cardiology Department, Cardiovascular Institute.
- October 1997-October 2003 **Editor-in-Chief**
Spanish Society of Cardiology (Spain)
Revista Española de Cardiología
- January 2006- Present **Senior Consultant**
Hospital Clinic, Barcelona (Spain)
Acute Cardiac Care Unit, Cardiology Department, Cardiovascular Institute.

EDUCATION AND TRAINING

- September 1969-June 1975 **Excellent**
Universidad Autónoma de Barcelona (Spain)
Medical Degree
- January 1976-December 1980 **Medical specialist in Internal Medicine; Medical specialist in Cardiology**
Hospital de Sant Pau, Universidad Autónoma de Barcelona (Spain)
Medical Residency in Internal Medicine and Cardiology.
- January 1981-May 1982 **Advanced Trainee in Interventional Cardiology**
Cardiology Department. Hospital de Sant Pau. Universidad Autónoma de Barcelona (Spain)
Clinical Fellowship, Interventional Cardiology Unit.
- June 1982-January 1985 **Acute Coronary Care subspeciality**
Montreal Heart Institute. University of Montreal, Montreal (Canada)
Clinical and Research Fellowship. Coronary Care Unit.

ADDITIONAL INFORMATION

Expertise Acute Cardiac Care
Acute Coronary Syndromes
Myocardial Infarction
Acute Heart Failure
Cardio-Oncology

- Publications
1. Augé JM, Bosch X, Crexells C, Oriol A. Subclavian artery to pulmonary circulation fistulas. *J Cath Cardiovasc Diag* 1983; 9: 175-180.
 2. Bosch X, Augé JM, García J, Oriol A, Crexells C. Potenciación postextrasistólica en la insuficiencia aórtica. Variabilidad de la respuesta tensional sistémica según la función ventricular. *Rev Esp Cardiol* 1983; 36: 287-292.
 3. Bosch X, Augé JM, García J, Oriol A, Crexells C. Potenciación postextrasistólica en la cardiopatía isquémica: su independencia de la postcarga. *Rev Esp Cardiol* 1984; 37: 99-103.
 4. Pomar JL, Bosch X, Chaitman BR, Pelletier C, Grondin CM. Late tears in leaflets of porcine bioprostheses in adults. *Ann Thoracic Surg* 1984; 37: 78-83.
 5. Grondin CM, Pomar JL, Bosch X, Santos JM, Enjalbert M, Campeau L. Reoperation in patients with patent atherosclerotic coronary vein grafts. A different approach to a different disease. *J Thoracic Cardiovasc Surg* 1984; 87:379-385.
 6. Waters DD, Miller DD, Bouchard A, Bosch X, Thérooux P. Circadian variation in variant angina. *Am J Cardiol* 1984; 54:61-4.
 7. Bosch X, Pomar JL, Pelletier LC. Early and late prognosis after reoperation for prosthetic valve replacement. *J Thoracic Cardiovasc Surg* 1984; 88:567-572.
 8. Bosch X, Thérooux P, Roy D, Moise A, Waters DD. Coronary angiographic significance of left anterior fascicular block during acute myocardial infarction. *J Am Coll Cardiol* 1985; 5:9-15.
 9. Waters DD, Bosch X, Bouchard A, Moise A, Roy D, Pelletier G, Thérooux P. Comparison of clinical variables and variables derived from a limited pre-discharge exercise test as predictors of early and late mortality after myocardial infarction. *J Am Coll Cardiol* 1985; 5:1-8.
 10. González- Santos JM, Ennabli K, Galiñanes M, Bosch C, Lespérance J, Pelletier LC. Surgical treatment of the post-infarction left ventricular aneurysm. Factors influencing early and late results. *J Thoracic Cardiovasc Surg* 1985; 33: 86-93.
 11. Thérooux P, Taeymans Y, Morissette D, Bosch X, Pelletier GB, Waters DD. A randomized study comparing propranolol and diltiazem in the treatment of unstable angina. *J Am Coll Cardiol* 1985; 5:717-722.
 12. Crean PA, Waters DD, Bosch X, Pelletier GB, Roy D, Thérooux P. Angiographic findings after myocardial infarction in patients with previous bypass surgery: explanations for smaller infarcts in this group compared with control patients. *Circulation* 1985; 71:693-698.
 13. Crexells C, Lidón RM, Augé JM, Bosch X, Pina C, García J, Oriol A. Hemodynamic effects of molsidomine in patients with severe chronic coronary disease. *Eur Heart J* 1985; 6: 1032-1039.
 14. Mata LA, Bosch X, David PR, Rapold HJ, Corcos T, Bourassa MG. Clinical and angiographic assessment 6 months after double-vessel percutaneous coronary angioplasty. *J Am Coll Cardiol* 1985;6:1239-1244.
 15. Pelletier LC, Pomar JL, Bosch X, Galiñanes M, Hébert Y. Complications of circulatory assistance with intraaortic balloon pumping: A comparison of surgical and percutaneous techniques. *J Heart Transpl* 1986; 5: 138-142.
 16. Gibson RS, Boden WE, Thérooux P and The Diltiazem Reinfarction Study Group. Diltiazem and

- reinfarction in patients with non-Q-wave myocardial infarction. *N Engl J Med* 1986; 315: 423-429.
17. González-Santos JM, Ennabli K, González-Santos ML, Gómez Recio M, Bosch X, Lespérance J, Pelletier LC. Influencia de la función ventricular en la evolución postoperatoria de los aneurismas ventriculares anteriores. *Rev Esp Cardiol* 1986; 39: 169-173.
18. Bosch X, Thérooux P, Waters DD, Pelletier GB, Roy D. Early postinfarction ischemia: clinical, angiographic and prognostic significance. *Circulation* 1987; 75:988-995.
19. Gibson RS, Young PM, Boden WE, Schechtman K, Roberts R and The Diltiazem Reinfarction Study Group. Prognostic significance and beneficial effect of diltiazem on the incidence of early recurrent ischemia after non-Q-wave myocardial infarction: Results from the Multicenter Diltiazem Reinfarction Study. *Am J Cardiol* 1987; 60: 203-209.
20. Simoons ML, Arnold AER, Betriu A and The European Cooperative Study Group for Recombinant Tissue-Type Plasminogen Activator (rTPA). Thrombolysis with tissue plasminogen activator in acute myocardial infarction: no additional benefit from immediate percutaneous coronary angioplasty. *Lancet* 1988; 1: 197-203.
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saphenous vein aortocoronary bypass graft occlusion. *Ann Thorac Surg* 1993;56:1101-6.

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clinical variables at presentation in patients with non-ST-segment elevation acute coronary syndromes. Results of the Proyecto de Estudio del Pronóstico de la Angina (PEPA). *Medicine (Baltimore)* 2002;81:434-442.

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- clopidogrel for high atherothrombotic risk and ischemic stabilization, management, and avoidance (CHARISMA) trial. *Am Heart J* 2005;150:401-7.
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Projects

1. Thrombolysis with r-TPA in acute myocardial infarction , 1985-86.
Co-Investigator.
Multicentre Clinical trial European Cooperative Study Group for recombinant tissue-type plasminogen activator (r-TPA). M. Verstraete (Leuven) chairman.
2. Alta precoz tras un infarto agudo de miocardio. Posibilidades de realización y factores predictivos , 1985-87.
Co-Investigator.
3. Fibrinólisis en el infarto agudo de miocardio con activador tisular del plasminógeno, 1986-87.
Co-investigador
Grant from Fondo de Investigaciones Sanitarias de la Seguridad Social (FIS 86/972). Instituto de Salud Carlos III, Spain
4. El factor natriurético auricular en el infarto agudo de miocardio de ventrículo derecho: determinaciones basales y respuesta a la sobrecarga de volumen, 1986-89.
Co-Investigator
Grant from Fondo de Investigaciones Sanitarias de la Seguridad Social (FIS 87/857). Instituto de Salud Carlos III, Spain.

5. Angioplastia aguda en pacientes con infarto agudo de miocardio tratados con trombolisis con rt-PA, 1987-88.
Co-Investigator.
Multicentre Randomized Clinical trial European Cooperative Study Group for recombinant tissue-type plasminogen activator (r-TPA).
6. Valor pronóstico del test de Dipiridamol con gammagrafía cardíaca de perfusión con Talio 201 en la fase aguda del infarto de miocardio, 1987-89.
Principal Investigator
7. Efecto de la aspirina a dosis bajas sola o administrada junto con dipiridamol en la prevención de la Obstrucción precoz de los injertos aortocoronarios, 1987-90.
Co-investigator.
Grant from Sección de Cardiopatía Isquémica de la Sociedad Española de Cardiología.
8. Eficacia de r-tPA en pacientes con angina inestable , 1988-89.
Co-investigator.
Grant from Departamento de Investigación de Boheringer Ingelheim.
9. Reducción del tamaño del infarto mediante trombolisis precoz prehospitalaria , 1990-1992.
Principal investigator.
Grant from Fondo de Investigaciones Sanitarias de la Seguridad Social (FIS 90/0284). Instituto de Salud Carlos III, Spain
10. Efecto de los inhibidores de la enzima de conversión de la angiotensina sobre la dilatación ventricular secundaria a infarto de miocardio, 1991-1993.
Co-investigator.
Grant from Fondo de Investigaciones Sanitarias de la Seguridad Social (FIS). Instituto de Salud Carlos III, Spain
11. Comparación de cuatro estrategias de tratamiento trombolítico (estreptocinasa con heparina cálcica o endovenosa, rt-PA más heparina sódica o estreptocinasa y rt-PA más heparina sódica) en el tratamiento de los pacientes con infarto agudo de miocardio, 1992-93.
Local Investigator.
Multicentre clinical trial
12. Evolución del pronóstico de los pacientes con infarto agudo de miocardio, 1992-94.
Co-investigator.
Grant from Sociedad Catalana de Cardiología
13. Efecto del enalapril sobre la función ventricular y la tolerancia al esfuerzo tras un infarto de miocardio, 1994-95.
Co-investigator.
Grant from Sociedad Española de Cardiología
14. Comparación de la Heparina de bajo peso molecular con la heparina sódica en el tratamiento de la angina inestable, 1994-95.
Local Investigator
Multicentre Clinical trial. Sponsor: Pharmacia.
15. Efectos de la oclusión coronaria aguda y el acondicionamiento isquémico sobre la relación presión-volumen del ventrículo izquierdo realizado durante los años 1994-1995.
Principal Investigator.
Grant from Fondo de Investigaciones Sanitarias de la Seguridad Social (FIS 94/1008). Instituto de Salud Carlos III, Spain
16. Marcadores celulares de la placa de ateroma inestable y su valor predictivo de restenosis, 1995-97.
Co-investigator.
Grant from Sociedad Española de Cardiología
17. Valor Pronóstico del Test de Dobutamina en la fase aguda del Infarto Agudo de Miocardio, 1995-96.
Co-investigator.
18. Comparación de un inhibidor de las glucoproteínas IIb-IIIa, el MK-383, con la heparina sódica en

el tratamiento de los pacientes con angina inestable, 1995-96.

Local Investigator.

Multicentre Clinical trial. Sponsor: MSD.

19. Estudio epidemiológico sobre la incidencia y tratamiento recibido por los pacientes con infarto agudo de miocardio ingresados en hospitales españoles, 1995-97.

Local Investigator

Grant from Sección de Cardiopatía Isquémica de la Sociedad Española de Cardiología.

20. Estudio multicéntrico aleatorizado, doble ciego, de grupos paralelos, para evaluar el efecto del Carvedilol sobre la mortalidad en pacientes con o sin evidencia clínica de insuficiencia cardíaca tras sufrir un infarto de miocardio, 1998-2000.

Local Investigator

Multicentre Randomized controlled trial. Sponsor: SmithKline-Beecham.

21. Estudio de la perfusión y de la inervación miocárdica en pacientes sometidos a revascularización miocárdica con rayos láser

Co-investigator.

Grant from BAYER and the Spanish Society of Cardiology, 1998

22. Marcadores de actividad inflamatoria en la angina inestable. Papel de la inflamación en su etiopatogenia y valor pronóstico, 1998-99.

Principal Investigator

Grant from Fondo de Investigaciones Sanitarias de la Seguridad Social

(FIS 98/0410). Instituto de Salud Carlos III, Spain

23. Ayuda a la publicación de publicaciones científicas: Revista Española de Cardiología, 2002-2004.

Principal Investigator

Grant from Fondo de Investigaciones Sanitarias de la Seguridad Social

para la difusión de la investigación. (FIS 01/8133). Instituto de Salud Carlos III, Spain

24. Efecto sobre la morbimortalidad cardiovascular del control estricto de la glucemia mediante insulino terapia endovenosa, en pacientes con síndrome coronario agudo e hiperglucemia sin diabetes conocida. (Estudio INSUCOR), 2002-4.

Co-investigator.

25. Importancia de la inflamación vascular, la trombosis y el estrés hemodinámico en la fisiopatología y el pronóstico de distintos subgrupos de Síndrome Coronario Agudo sin elevación del segmento ST, 2003-05.

Coordinated project.

Investigator

Grant from Red Temática de Enfermedades Cardiovasculares del Instituto de Salud Carlos III (RECAVA).

26. Estratificación del riesgo del paciente con dolor torácico y troponina normal. Valor de los nuevos marcadores serológicos, 2003-5.

Coordinated Project

Investigator

Grant from Red Temática de Enfermedades Cardiovasculares del Instituto de Salud Carlos III (RECAVA).

27. Estudio de los mecanismos de un primer síndrome coronario agudo: posibles diferencias en el perfil de coagulación e inflamación entre la Angina Inestable y el Infarto sin elevación del segmento ST, 2003-5.

Coordinated Project

Investigator

Grant from Red Temática de Enfermedades Cardiovasculares del Instituto de Salud Carlos III (RECAVA).

28. Efecto del control estricto de la glucemia mediante insulino terapia endovenosa sobre el control metabólico y la inflamación vascular en pacientes con síndrome coronario agudo e hiperglucemia.

Un estudio prospectivo y aleatorizado.

Principal Investigator

Grant from Merck Farma y Química 2004 of the Spanish Society of Cardiology.

29. Factores pronósticos en los pacientes con dolor torácico sin elevación del ST. Resultados de la implementación de un nuevo score de riesgo.

Coordinated Project

Investigator

Grant from Fundación Española del Corazón para investigación clínica y básica en cardiología, 2005.

30. Control de calidad de la asistencia a pacientes con síndrome coronario agudo. 2006-08

Co-investigator.

Grant from Glaxo-Smith Kline.

31. Papel de la respuesta inflamatoria y la liberación de óxido nítrico en la fisiopatología del shock cardiogénico post-infarto de miocardio.

Principal Investigator

Grant from Sociedad Española de cardiología a la Investigación Clínica y Básica, 2006-2007.

32. Grado de inflamación vascular y trombogenicidad en pacientes no diabéticos con síndrome coronario agudo sin elevación del segmento ST y alteración en el metabolismo de la glucosa.

2006-08

Principal Investigator

Ayuda del Fondo de Investigaciones Sanitarias de la Seguridad Social (FIS 2006/PI050120). Instituto de Salud Carlos III, Spain.

33. Prevención de la disfunción ventricular con enalapril y carvedilol en pacientes sometidos a quimioterapia intensiva para el tratamiento de hemopatías malignas.

Grant from Instituto de Salud Carlos III, Spain

Reference EC07/90211

2008-2011.

Principal investigator

34. Células endoteliales circulantes y células progenitoras endoteliales en la enfermedad cardiovascular aguda. Correlación con la función endotelial y la evolución clínica.

Grant from Instituto de Salud Carlos III. 2009-2011.

Reference: PI080272

Full-time Co-investigator.

35. Utilidad de la angiografía coronaria no invasiva mediante tomografía computerizada multidetector en el diagnóstico del síndrome coronario agudo en urgencias.

Grant from: Instituto de Salud Carlos III. FIS para evaluación de tecnologías sanitarias. 2010-2011.

Reference: PI09/90513

Co-investigator.

36. Actividad de la enzima convertidora de angiotensina 2 en el infarto agudo de miocardio y su relación con la disfunción y el remodelado ventricular evaluado mediante resonancia.

Grant from: Sociedad Española de Cardiología, 2011-2013.

Co-investigator.

37. Afección cardíaca en la amiloidosis primaria: estudio de biomarcadores séricos, resonancia magnética 3-Tesla y caracterización genómica de las cadenas ligeras amiloidogénicas.

Grant from: Instituto de Salud Carlos III. 2013-2015.

Reference: PI12/01290

Co-investigator.

38. Role of Serum Biomarkers of Cardiac Fibrosis and Magnetic Resonance Imaging to Predict Adverse Cardiac Remodeling and Ventricular Arrhythmia Susceptibility.

Co-investigator

Grant from: SIEMENS Health Care Diagnostics Inc. 2011-2014.

35. Paper del sistema GAS-6-TAM en la diferenciació fibroblàstica i el remodelat ventricular post infart agut de miocardi.

Principal investigator

Societat Catalana de Cardiologia. 2015-2016.

36. Papel del sistema GAS-6-TAM en la diferenciación fibroblástica y el remodelado ventricular tras el infarto agudo de miocardio.

Co-Principal Investigator

Grant from Instituto de Salud Carlos III. 2016-2018.

41. Role of resident macrophages and fibroblasts on heart remodeling and healing after myocardial infarction: the contribution of the GAS-6-TAM system.

Co-investigator

Grant from Fundació Marató de TV3. 2016-2020.

Memberships

MEMBERSHIP SCIENTIFIC SOCIETIES

1997-current: Fellow of the European Society of Cardiology

1988-current: Member of the Heart group of the Cochrane Collaboration.

1986-current: Member of the Ischemic Heart Disease and Coronary Care Units section of the Spanish Society of Cardiology.

1985-current: Member Spanish Society of Cardiology.

MEMBERSHIP SCIENTIFIC COMMITTEES

2011-current: Member of the International Cardioncology Society (ICOS).

2011-2014. President of the Scientific Committee of the Myocardial infarction Code. Department of Health. Catalonia Government, Spain.

2007-2011: Member of the Advisory Board of the Cardiovascular Health Project of the Department of Health. Catalonia Government, Spain.

2007-2010: Member of the Commission on myocardial revascularization in acute myocardial infarction. Department of Health. Catalonia Government, Spain.

PAST SCIENTIFIC POSTS

2007-2009: President. Catalan Society of Cardiology

1997-2003: Editor-in-Chief, Revista Española de Cardiología

1997-2003: Member of the Board of the Spanish Society of Cardiology

1998-1990: Vice president, Catalan Society of Cardiology

Other Relevant Information

1985-current.

Associate Professor of Medicine, University of Barcelona. Spain