

# SCIENTIFIC MEETING HERACLES NETWORK 2013

Girona, May 30, 2013

## SAN JUAN DE ALICANTE UNIVERSITY HOSPITAL RESEARCH TEAM (HUSJ)

Vicente Bertomeu Martínez, Ph. D.



- 1. Human resources. Department structure.**
- 2. Material resources.**
- 3. Main research lines.**
- 4. Research projects.**
- 5. Future projects.**

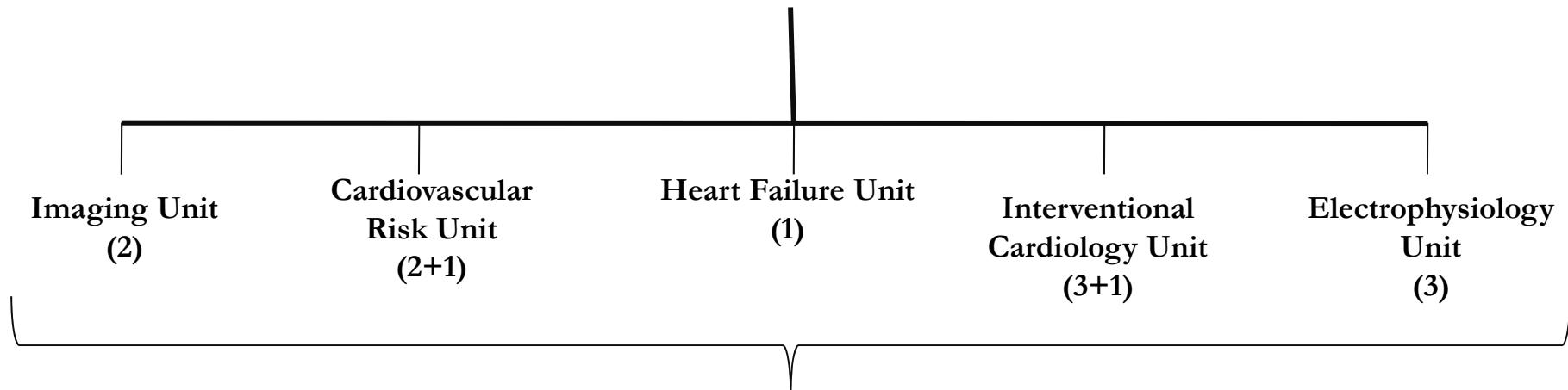
# SAN JUAN DE ALICANTE UNIVERSITY HOSPITAL RESEARCH TEAM (HUSJ)

Internal Medicine Department



Cardiology Division

(13 physicians, 10 FIT, 1 research fellow)



*Miguel Hernández University- San Juan de Alicante  
Hospital Linkage*

## RESEARCH TEAM MEMBERS

- Vicente Bertomeu Martínez (coordinator), Ph. D.
- Vicente Bertomeu González, Ph. D.
- Pilar Carrillo Saez, Ph. D.
- Jesús Castillo Castillo, M.D.
- Alberto Cordero Fort, Ph. D.
- Ramón López Palop, Ph. D.
- José Moreno Arribas, M.D.
- Pedro Morillas Blasco, Ph. D.
- Juan Quiles Granado, Ph. D.

## INTERVENTIONAL CARDIOLOGY UNIT

1. A cath-lab
2. Two intravascular ultrasound systems (IVUS).
3. Two intracoronary functional assessment systems.
4. Optical coherence tomography
5. Digital quantification Laboratory (IVUS and angiography)
6. Two Assessment of Platelet Function Systems (Multiplate<sup>©</sup> and Verifynow<sup>©</sup>)

## CATH LABORATORY

- 1- Invasive physiological evaluation of coronary stenosis.
- 2- Anato-functional correlation of coronary lesions.
- 3- Platelet activity of new antiplatelet drugs for Acute Coronary Syndrome.
- 4- Results of percutaneous coronary interventions in elderly patients.
- 5- Tissue characterization of coronary lesions.

### Publications in the last five years:

- Rev Esp Cardiol.*2013. *In press*
- Eurointervention.*2013. *In press*
- Am J Cardiol.*2013;111:1277-83.
- Cath Cardiov Interv.*2013;81:E186-E194.
- Rev Esp Cardiol.*2012;*Epub ahead of print.*
- J Thromb Haemost.*2012;11:379-381.
- Rev Esp Cardiol.*2012;65:164-170.
- J Am Coll Cardiol.*2011;58:351-358.
- Rev Esp Cardiol.*2011;64:833-834.
- JACC. Cardiovascular Interventions.*2010;3:911-919.
- Rev Esp Cardiol.*2010;63:1101-1103.
- Rev Esp Cardiol.*2010;63:686-694.
- Rev Esp Cardiol.*2009;62:1250-1259.

## ARRHYTHMIAS AND ELECTROSTIMULATION UNIT

1. EP lab with digital radiology equipment.
2. 64-channel polygraph.
3. Stimulator (integrated with polygraph)
4. Electroanatomical navigation system.
5. Programmers and equipment for all types of cardiac pacing devices.
6. External defibrillator.
7. Tilt test with continuous non-invasive blood pressure monitoring
8. ICE (intracardiac echocardiography)

## ARRHYTHMIAS AND ELECTROSTIMULATION UNIT

- 1- Epidemiology of atrial fibrillation.  
Prediction models in ESCARVAL population.
- 2- Impact of atrial fibrillation in hospitalized patients with heart failure.
- 3- Prevalence and prognostic factors of atrial arrhythmias in patients with devices.
- 4- Usefulness of analysis of intracavitory data in differential diagnosis of tachycardias recorded in implantable automatic defibrillators.
- 5- Efficacy and safety of percutaneus renal denervation program.

### Publications in the last five years:

- *J Cardiovasc Electrophysiol.* 2013 Mar;24(3):364-6.
- *Rev Port Cardiol.* 2013 Feb;32(2):103-9.
- *Rev Esp Cardiol (Engl Ed).* 2012 Dec;65(12):1079-85.
- *Eur J Heart Fail.* 2012 Sep;14(9):974-84.
- *Int J Cardiol.* 2012 Aug 9;159(1):21-8.
- *Clin Cardiol.* 2011 Dec;34(12):748-54.
- *Rev Esp Cardiol.* 2011 Dec;64(12):1100-8.
- *Rev Esp Cardiol.* 2011 Aug;64(8):649-53.
- *Expert Opin Pharmacother.* 2011 Jul;12(10):1473-9.
- *Int J Cardiol.* 2011 Jan 21;146(2):219-24.
- *Int J Cardiol.* 2010 Dec 3;145(3):592-3.
- *Rev Esp Cardiol.* 2010 Aug;63(8):943-50.
- *Eur Heart J.* 2010 Jul;31(14):1752-63.
- *Blood Press.* 2010 Apr;19(2):104-9.
- *Eur J Heart Fail.* 2010 Jan;12(1):38-44.
- *J Clin Hypertens (Greenwich).* 2009 Jun;11(6):303-8.
- *Rev Esp Cardiol.* 2009 Mar;62(3):282-7.

## HEART FAILURE AND CARDIOVASCULAR RISK UNITS.

1. Prevalence of secondary etiologies of hypertension. Impact on cardiovascular risk profile.
2. Prevalence of target organ damage in patients with hypertension.
3. Circulating biomarkers of collagen metabolism, inflammation and apoptosis in hypertension and target organ damage.
4. Identification of peripheral arterial disease markers and their impact on hypertension prognosis.

### Publications in the last five years:

- *Med Clin (Barc)* 2012;139:61-4
- *Rev Esp Cardiol* 2012;65:819-25.
- *Blood Press.* 2012;21:360-6.
- *Rev Esp Cardiol* 2011;64:417-20
- *Rev Esp Cardiol.* 2011 64(10):939-41. Epub 2011 Jun 12.
- *Am J Cardiol.* 2011 108(11):1570-5. Epub 2011 Aug 24.
- *Eur J Clin Invest.* 2011 41(12):1268-74. Epub Apr 26.
- *Int J Cardiol.* 2011 Aug 18;151(1):84-88. Epub 2010 May 21.
- *Rev Esp Cardiol.* 2010;63:54-9.
- *Rev Esp Cardiol.* 2010;63:103-6.
- *J Hum Hypertens.* 2010 25(10):600-7. Epub Dec 16
- *J Hypertens.* 2009;27:341-7.
- *Am J Cardiol.* 2009;104:1494-8.
- *Int J Clin Pract* 2009;63:1314-9.
- *Rev Esp Cardiol.* 2008;61:418-21
- *Rev Esp Cardiol.* 2008;61:972-5.
- *Nefrologia* 2008;28:621-6