1. Complex cardiac anatomy and the sophisticated functional mechanisms of the cardiac structures require a transition from a two dimensional to a three dimensional approach. (this thesis)

2. Real-time three-dimensional echocardiography has emerged as a novel echocardiographic technique for the assessment of left ventricular dyssynchrony based on the analysis of regional volumetric changes. (this thesis)

3. The use of echo contrast significantly improves endocardial border visualization and reproducibility of the measurements of global and regional left ventricular systolic function. (this thesis)

4. Magnetic resonance imaging offers the unique opportunity to assess left ventricular dyssynchrony and the total extent of scar in a single session: both these parameters are associated with echocardiographic response to cardiac resynchronization therapy. (this thesis)

5. Quantification of regurgitant orifice and volume of functional mitral regurgitation with three-dimensional echocardiography is feasible and accurate and demonstrated to be superior to the currently recommended two-dimensional echocardiographic approach. (this thesis)

6. Current and evolving echocardiographic techniques significantly contribute to the much needed process of the transformation of echocardiography from a subjective art of image interpretation to a set of objective diagnostic tools. (ASE/EAE Consensus statement on methodology and indications J Am Soc Echocardiogr 2011;24:277-313)
7. Three-dimensional echocardiography has transitioned from a research tool to a methodology useful in everyday clinical practice. (Lang RM et al. Cardiol Clin 2007: xiii–xiv)

8. The burden of global and regional scar may have a significant influence on the ability of the myocardium to respond to CRT. (White JA et al. J Am Coll Cardiol 2006;48:1953–60)


10. To improve the cost-effectiveness of heart failure device therapy, we must improve the patient selection process with intelligent and flexible diagnostic algorithms. This clearly also requires a foresighted investment in new imaging technologies. We now know that we can do better! (Breithardt O et al. Circulation. 2006;113:926-8)

11. Absence of humor renders life impossible. (Colette)

12. Taking a new step, uttering a new word, is what people fear most." (Fyodor Dostoyevsky)

13. The world is like that -- incomprehensible and full of surprises. (Jorge Amado)