**APPENDIX A:**

**Recruitment of Volunteer Subjects**

Ninety percent of patients were recruited by one investigator (LDM) from among his internal medicine clinic population, and were solicited to include representation of cardiac pathology (e.g., a very large man with cardiomyopathy and left ventricular ejection fraction of 10-15%, a woman with pulmonary hypertension who always has very high CVP, a man with severe hypertension and history of heart failure, a man with mitral regurgitation and history of heart failure and mitral valve repair, an obese diabetic man with history of heart failure, a wheelchair-bound man with severe tricuspid regurgitation and history of heart failure) as well as other chronic illness (e.g., several dialysis patients, a woman with uncontrolled diabetes and hypothyroidism, a woman with severe scleroderma, two men with HIV/AIDS – one of whom had a colostomy). Volunteer patient recruitment focused on those patients who had previously volunteered for a mini-curriculum in physical examination skills for medicine interns, and also preferentially on those patients known to have flexible schedules (i.e., those who work part-time, are retired, or are disabled). At the time of the training sessions, most volunteer patients with histories of heart failure were either euvolemic or hypovolemic. Ten percent of volunteer subjects were not our clinic patients (two medical student volunteers and one healthy family member of another volunteer patient).

As noted in the manuscript, the cardiologist selected the 5 volunteers used for skills testing to represent a range of IVC appearance and body mass index (BMI). One of the 5 test subjects had markedly elevated CVP with a dilated IVC; this woman was a test subject for both the intial and follow-up assessments. The other 4 subjects used for skills testing after the initial training session and the additional 4 subjects used for follow-up skills testing at least 6 weeks later included a mix of the volunteer clinic patients described above.