The following descriptions of the 28 studies currently being undertaken by the Cardiovascular Research Institute of Southern California just this year will give you a clear sense of the depth, breadth and extent of the Foundation’s research activities. These studies represent exactly where your contributions go and the outcomes we hope to achieve.
12. Mobility: In this study we hope to demonstrate the safety and efficacy of the Absolut Pro Cobalt chromium Metal Stent System in patients with obstructive iliac artery disease. One of these special stents in the leg may relieve symptoms, improve blood flow and lead to improved long-term results. (Intervention—S. Dohad)

13. New methods to diagnose implantable cardioverter defibrillator (ICD) lead failures: Implantable defibrillators automatically activate electric shock to save patients who have a risk of sudden death. Designing reliable equipment remains a challenge because these devices must remain in the body chemically and tolerate hundreds of millions of heart cycles mechanically. As explained in Study #12 above, leads that deliver the shock are the weak link in the system. Present methods to identify lead failures are unreliable. Using advanced electromagnetic theory and mathematical modeling, this research is developing new ways of detecting lead failures which potentially can save lives.

14. Odyssey Longterm—Evaluating the long term potential of REGN727: In this study we hope to demonstrate the safety and efficacy of the INNOVA Bare Metal Stent System in patients with obstructive superficial femoral and popliteal artery disease. Use of these special stents in the leg may relieve symptoms, improve blood flow and lead to improved long-term results. (Intervention—S. Dohad)

15. Odyssey Outcomes: This new exciting class of medications offers new hope and adds to our treatment options. (Medication—R. Karlsberg)

16. Odyssey Light: We have developed a new class of treatments for coronary artery disease, is genetically engineered to lower LDL (bad cholesterol). Lowering LDL-C remains the primary objective for the management of elevated cholesterol and has been supported by numerous morbidity and mortality trials. Despite the existence of very effective LDL-C lowering therapies, such as statins, many patients cannot tolerate statins or do not achieve treatment goals. This new class of medications offers new hope and adds to our treatment options in patients who have recently suffered a heart attack. (Medication—S. Dohad)

17. Optical coherence tomography in carotid stenting: We have developed a new technique to refine stent placement guided by this new light-based seeing technology that has a resolution 100 times the current intravascular seeing device (IVUS stands for intra-vascular ultrasound). (Intervention—S. Dohad)

18. Orbit II: A new class of treatments for coronary artery disease, in particular non-calcified “soft plaque.” This research is now being conducted that would allow introduction of these systems in the USA. (Innovation—E. Gang)

19. Vision: This is a study to evaluate the effect of long-term treatment with BELVIQ on the incidence of major adverse cardiovascular events and conversion to Type II Diabetes Mellitus in obese and overweight subjects with cardiovascular disease or multiple cardiovascular factors. (Medication—R. Karlsberg)

20. Proteximus: Pursuing new paradigms for the diagnosis of Cardiovascular Disease. This study will study the entire human protein profile to define metabolic markers, DNA and RNA that are associated with aggressive coronary artery disease, in particular non-calcified “soft plaque.” This allows us to demonstrate the role of both the genomics and proteomic characteristics of coronary artery disease. Hopefully this will lead to new diagnostic tests and treatments for coronary artery disease. (Innovation—R. Karlsberg/Shayman)

21. RESPOND CRT trial: “Biventricular” ICD’s are devices placed in the heart to improve heart function and treat heart failure. Approximately 30% of recent patients are non-responsive to therapy. This non-responsive can be decreased by optimizing the device programming for each patient. This new device automatically and instantly optimizes each patient based on their needs. (Intervention—E. Gang)

22. Robotic navigation of catheters in the human body: Treatment of cardiac arrhythmias may involve invasive approaches that are challenged by manipulating catheters inside the heart. Improved and more precise manipulation may be achieved with robotic systems controlled by super magnets. Ongoing research in Europe with nearly 100 patients has demonstrated precise, safe and effective treatment of heart rhythm disturbances using these advanced and innovative systems. Additional research is now being conducted that would allow introduction of these systems in the USA. (Innovation—E. Gang)

23. SuperNova—Stenting of the arteries in the upper leg: In this study we hope to demonstrate the safety and efficacy of the INNOVA Bare Metal Stent System in patients with obstructive superficial femoral and popliteal artery disease. Use of these stents in the leg may relieve symptoms, improve blood flow and lead to improved long-term results. (Intervention—S. Dohad)

24. TIMI 61—Camellia: This is a study to evaluate the effect of long-term treatment with BEVLAG on the incidence of major adverse cardiovascular events and conversion to Type II Diabetes Mellitus in obese and overweight subjects with cardiovascular disease or multiple cardiovascular factors. (Medication—R. Karlsberg)

25. New system for recording heart and nerve activity in patients: A new catheter is being developed for directly recording very small cardiac and nerve signals in the heart and kidney arteries. These signals have hitherto never been recorded in patients in clinical settings and offer the potential for new ways to diagnose and treat cardiovascular conditions. (Innovation—E. Gang)

26. Odyssey Longterm—Evaluating the long term potential of REGN727: This new exciting class of medications offers new hope and adds to our treatment options. (Medication—R. Karlsberg)

27. New system for recording heart and nerve activity in patients: A new catheter is being developed for directly recording very small cardiac and nerve signals in the heart and kidney arteries. These signals have hitherto never been recorded in patients in clinical settings and offer the potential for new ways to diagnose and treat cardiovascular conditions. (Innovation—E. Gang)