

Ochsner Research Update

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Ochsner Clinic Foundation research activities continued to make solid progress over the past year. For example, a new clinical and research collaboration was forged to link Ochsner, Tulane University, Louisiana State University Health Sciences Center, and Xavier University in the Louisiana Cancer Research Consortium. This partnership is designed to facilitate the introduction and evaluation of new cancer therapies and to bring cutting-edge research from the bench to the bedside. In this same vein, Dr. Adam Riker, Medical Director of Cancer Services, has launched a large clinical trial of immunotherapy for metastatic melanoma, a project that aims to utilize the body's own immune defenses to eradicate aggressive tumors with relatively mild side effects. In the area of cardiovascular services, Ochsner interventionists continue to develop improved techniques for treating vascular disorders, such as narrowing of the renal arteries to provide more effective therapy with fewer complications. Other Ochsner cardiologists continue their nationally recognized work on determining risk factors for mortality from coronary artery disease. Similarly, an active research program is ongoing in both adult and pediatric endocrinology aimed at defining the processes that lead to osteoporosis and developing novel means of prevention. Many other examples could be given because research is growing in virtually every clinical department. In addition, the Ochsner Center for Health Research continues its vigorous program as exemplified by studies identifying the factors that determine patient adherence to medications as well as defining the economic implications of poor medication adherence.

Ochsner basic research has also once again made significant progress. For example, the Laboratory of Cellular Immunology is not only continuing its groundbreaking work in defining how lymphocytes develop and become cancerous but also is working to identify so-called cancer stem cells: the root cause of colon

and other cancers. The Laboratory of Molecular Genetics continues to study the way the blood pressure-raising hormone angiotensin II acts within cells—a mode of action that only recently has become widely appreciated but that is potentially of great importance to the development of cardiovascular disease. The Hypertension Research program conducted pioneering research into the adverse effects of salt on the cardiovascular system and on ways to prevent this damage. The Laboratory of Molecular Cardiology investigated how insulin works in cells in order to determine why patients with diabetes suffer more restenosis after angioplasty than do other patients. Other Ochsner scientists are working to identify novel therapeutic compounds that interfere with specific protein kinases in lymphoma and brain tumor cells, while still others are working to develop ways of improving nerve function after traumatic injury. Finally, during the year, Dr. Leonard Meggs, an established investigator in kidney biology, was recruited as head of the Renal Section and brought with him a team of collaborators with whom he is working to define the mechanism by which renal disease progresses over time.

Although much more could be said, the activities I have outlined serve to provide an overview of the research program and to make clear why Research Night 2010 was so successful. A total of 89 posters were mounted during the program, and attendance was excellent. Once again, investigators took the opportunity to establish formal and informal intramural and extramural collaborations. In the context of collaboration, another achievement of the past year is the solidification and growth of the collaboration between Ochsner Clinic Foundation and the University of Queensland. Ochsner was delighted to host leaders from the University of Queensland at Research Night. The evening helped to exemplify the scientific ties that we all hope will grow out of our joint effort. In that vein, it is interesting to note that I recently participated in the planning of the February 2010 Gordon Research Conference on Angiotensin that was held in California—and in that capacity I served alongside the conference Chairman, Professor Walter Thomas of the School of Biomedical Sciences at the University of Queensland.

In summary, the Ochsner research enterprise is making great progress and looks forward to achieving even more in the coming academic year.

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