

RESOURCES

Laboratory: Dr. Hoffman's laboratory is located on the 7th floor of the University of Miami Rosenstiel Medical Sciences Building (RMSB) and occupies approximately 1,500 square feet of space. The RMSB, Batchelor Building, and the Molecular Pathology Laboratory located on the 4th floor of the Papanicolaou Building are all located contiguously within the Schoninger Quadrangle. The new *South Florida Clinical Research Institute* is located on 14th Street just across from the Schoninger Quadrangle.

Clinical: Dr. Hoffman's clinical research is carried out on the 9th floor of the new 300,000 square foot *South Florida Clinical Research Institute* Building where it is supported by the GCRC/CTSA and their staff. Aphaeresis and cell processing facilities, including laminar flow hoods, controlled rate freezer and liquid nitrogen storage, are located on the 5th floor. Also located in close proximity are the University of Miami Hospital and Clinics, the Jackson Ambulatory Care Clinics and Jackson Memorial Hospital. Jackson Memorial Hospital (JMH) contains 1567 licensed beds and is a non-profit, tertiary care hospital and the major teaching hospital for the University of Miami. It is one of the largest medical centers in the U.S. The University of Miami and JMH are unique clinical resources that serve as the sole tertiary rheumatology center for all of South Florida. They have a long history of excellence in rheumatology and care for large numbers of connective tissue disease patients, including a very large population of under-represented Hispanic and African American patients. Aphaeresis is done in the General Clinical Research Center (GCRC) now call the Participant and Clinical Interaction Resource (PCIR) within the University of Miami. Rheumatic disease patients are seen in these various setting on a daily basis by fellows and faculty within the Division of Rheumatology and Immunology. Currently, the Division of Rheumatology is comprised of 30 clinical faculty, 6 full-time M.D./D.O. academic/research faculty and 4 full-time Ph.D. research faculty.

Animals: Animal facilities are in an American Association for Accreditation of Laboratory Animal Care (AAALAC) approved facilities approved state-of-the-art vivarium located on the 8th floor of the Batchelor Building on the Shoninger Quadrangle. Dr. Hoffman's animals currently are housed in room 833.

Computer: One or more desktop computers, which are attached to the University of Miami network, are located in every laboratory and office. Software includes specialized software for statistical analyses, as well as specialized proprietary software that interfaces with laboratory equipments, including that used for real-time PCR, peptide synthesis, laser capture microdissection, mass spectrometry devices.

Offices: Dr. Hoffman and the Division of Rheumatology and Immunology occupy a suite of offices on the 9th floor of the *South Florida Clinical Research Institute* constituting approximated 3,000 square feet. In addition, there are shared conference rooms, classrooms, lunch rooms as well as other flexible and shared space areas located on the 5th and 9th floors of the *Institute*.

Major equipment: Major equipment in Dr. Hoffman's laboratory includes: Applied Biosystems 7300 Real Time PCR system, Advanced ChemTech Apex 396 peptide synthesizer, Applied Biosystems peptide synthesizer, Beckman 96 well luminometer, Miltenyi autoMACS, BioRad GenePulser, Virtis rate controlled freezer, Nikon Diaphot microscope with epifluorescence, Kodak digital image documentation system for fluorescence, luminescence, transmission, or reflection of UV and visible light, one 6 foot and one 8 foot Baker laminar flow hoods, three water-jacketed CO2 incubators, two cell harvesters, Beckman scintillation counter, SurgiVet isoflurane anesthesia system for small animal surgery, Virtis Freezemobile lyophilizer, three high capacity liquid nitrogen dewars for cell storage, BioRad and Perkin Elmer DNA Thermal cycling devices, three upright -80oC freezers, three upright -20oC freezers, a refrigeration cabinet that houses two complete fraction collectors systems (column, fractions collector, UV monitor and recorder), ThermoSpectronic spectrophotometer, New Brunswick Scientific controlled environmental incubator shaker, 3 Eppendorf 5810R refrigerated centrifuges, SorvalRC-3B superspeed refrigerated centrifuge, Sorval RT6000B refrigerated centrifuge, 2 Sonifier 450 sonicators, 4 BioRad SDS-PAGE Electrophoresis Cells with power supplies and transfer apparatus, BioTek ELISA reader, and Savant DNA SpeedVac. In addition to the equipment located in Dr. Hoffman's laboratory, his laboratory has access to all shared resources within his secondary Department, the Department of Microbiology and Immunology, as well as Dr. Malek's laboratory. These are located on the 3rd floor of the RMSB. In Dr. Nassiri's Division of Molecular Pathology Laboratory within the Department of Pathology, he has access to laser microdissection, microarray analysis and sequencing mass spectrometry. Finally, we also have access to extensive core facilities at the University of Miami including facilities for: flow cytometry, cell sorting, DNA sequencing, rapid histological tissue fixation and slide preparation, immunohistochemistry, confocal imaging, laser microdissection, microarray analysis, and sequencing mass spectrometry.

Publication Costs: A budget of \$2,000 per year is being requested, with incremental increases, to cover publication costs, reprint, submissions and reprints.

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FACILITIES: Specify the facilities to be used for the conduct of the proposed research. Indicate the performance sites and describe capacities, pertinent capabilities, relative proximity, and extent of availability to the project. Under "Other," identify support services such as machine shop, electronics shop, and specify the extent to which they will be available to the project. Use continuation pages if necessary.

Laboratory:

Dr. Hoffman's laboratory occupies approximately 500 square feet on the second floor of the University of Miami Rosenstein Medical Sciences Building (RMSB) and approximately 2,000 square feet of space in the Research Service of the Miami VA Medical Center (see continuation page).

Clinical:

The University of Miami, NIH funded, General Clinical Research Center is located on the sixth floor of the Miami VA Medical Center and provides state of the art facilities for apheresis, as well as routine clinical examination of patients and phlebotomy services. Dr. Hoffman's apheresis equipment is housed in the GCRC and operated by apheresis certified nursing staff in the GCRC.

Animal:

Certified facilities to house transgenic and conventional mice strains are available in both the RMSB and the VA Research Service.

Computer:

Networked desktop computers are available in the laboratory and in the administrative offices of the Division of Rheumatology. Specialized software available includes Mac Vector packages for DNA and proteins analysis, and CellQuest software package for analysis of flow cytometry data.

Office:

The Division of Rheumatology and Immunology occupies approximately 3,000 square feet of office space in Dominion Towers. This includes offices for all faculty and support staff, conference facilities and a Divisional

Other:

MAJOR EQUIPMENT: List the most important equipment items already available for this project, noting the location and pertinent capabilities of each. Major equipment that Dr. Hoffman currently has in his laboratory includes: Haemonetice MC+ apheresis device (housed in the GCRC), Applied Biosystems 7300 Real Time PCR system, Applied Biosystems peptide synthesizer, Miltenyi autoMACs, BioRad GenePulser, Virtis rate controlled freezer, Nikon Diaphot microscope with epifluorescence. Kodak digital image documentation system for UV and visible light, one 6 foot Nuair and one 8 foot Baker laminar flow hood, three water-jacketed CO2 incubators, two cell harvesters, Beckman scintillation counter, Harvard anesthesia system for small animal surgery, Virtis Freezemobile lyophilizer, two high capacity liquid nitrogen dewars for cell storage, multiple Perkin Elmer DNA Thermal cycling devices, three upright -80°C freezers, three upright -20°C freezers, a walk-in cold room that houses two complete fraction collectors systems (column, fractions collector, UV monitor and recorder), ThermoSpectronic spectrophotometer, New Brunswick Scientific controlled environmental incubator shaker,

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