

EXAMPLE OF *FACILITIES & OTHER RESOURCES* SECTION

FACILITIES & OTHER RESOURCES – NAME OF PRIMARY PERFORMANCE SITE

Environment – Contribution to Success

The facilities and other resources available to the PD/PI and his research team at the primary performance site include everything needed to undertake and complete the proposed research project successfully. When he set up his office and adjacent laboratory they were equipped with this project specifically in mind. These resources are complemented by a contemporary, departmental core flow-cytometry facility to which he has access 24/7. Additional complementation includes a pathogen-free animal-care facility and laminar-flow racks that will help to ensure high-quality starting material for experiments. Face-to-face videoconferencing equipment maximizes interactions between members of the research team, especially those who are at a distance (see *Consortium/Contractual Arrangements* and *Facilities & Other Resources – Name of Second Performance Site*). The intellectual environment is rich with other extramurally funded investigators who are doing work that is complementary to what is proposed here. These facilities, together with those described for the other project/performance sites (see following descriptions), collectively provide a scientific environment that is strongly supportive of the proposed research and, therefore, success of the project.

Institutional Commitment to the Early Stage Investigator

The PI qualifies as an Early Stage Investigator for two more years. There is extensive evidence of institutional commitment to his development as an academic researcher. His salaried 12-month, tenure-track academic appointment includes a total of six person months (50% effort) of protected research time. The start-up package provided to him included laboratory space, equipment and research funds needed to launch his investigative program. The package was sufficient to yield the preliminary data needed for this, his first R01 application. Support for a graduate student was initially provided by his department. That student is now funded through an individual NIH fellowship. Support for the postdoctoral research fellow, Jason Albright, that is requested in this application was also provided by the PI's department so that a highly qualified individual could be recruited in advance of making this proposal. The same approach was used to recruit the technician, Alan Mellone, for whom support is also requested in this application (see *Personnel Justification* for both Albright and Mellone). In addition, the applicant has been provided with unrestricted access to a departmental flow-cytometry facility (see Facility subsection below), without which essential parts of the proposed research project could not be pursued. Administrative support is provided to the PI by a departmental administrative core. Important career-development programs are also available to him, including GSC 1497, a formal course on the ethical conduct of research; a College-sponsored workshop designed to develop proposal-writing skills; and a departmental editor who provides assistance with the development of manuscripts. His research falls under one of three University-wide priority research areas, which will help to ensure continued institutional commitment to him and his research program.

Facilities:

Laboratory: The PI is assigned a 1200 sq ft laboratory that is located in departmental space, adjacent to his office. It is subdivided into a general purpose area (800 sq ft), a positive-pressure cell-culture room (200 sq ft), a medium preparation area (100 sq ft) and a walk-in cold

room (100 sq ft). Minor equipment (cost < \$5K) in this space includes: *These laboratory facilities were specifically designed and equipped to support the continuum of research for which the project proposed here is the next step.*

Animal: Specific pathogen-free mice (C57BL6) will be purchased from the Jackson Laboratory, a supplier known for the high quality and reliability of the animals it provides. They will be housed in the institution's AAALAC-accredited animal-care facility, which is in a dedicated building adjacent to the one that houses the PI's laboratory (see above). Cages will be located on laminar-flow racks in a 100 sq ft room dedicated to this project. In addition to oversight by a board-certified laboratory-animal veterinarian, all animal technicians are rigorously trained and certified. Microbiological, clinical pathological and necropsy diagnostic facilities are available on site, with back up from the State's veterinary diagnostic laboratory. *Success of the proposed research is critically dependent on the acquisition and maintenance of mice in a pathogen-free state.* The facilities described will help ensure such quality.

Clinical: Not applicable.

Computer: The PI has two computers: (1) Dell PC located in the PI's office (Windows XP Professional); and (2) a Compaq laptop model Evo N1000c (Pentium 4; 170GHz; 256 MB of RAM; Windows XP Professional). Each technician and student is equipped with a similar laptop. Skype for Windows (business version) telecommunication software and equipment is on hand for all members of the research team. *The combination of these information technologies contributes to the potential for success by assuring both efficient data handling and optimal communication among members of the research team.*

Office: The PI's 144 sq ft office is adjacent to his laboratory. It is equipped with desk, credenza, desk and task chairs, two 4-drawer filing cabinets and hardwired high-speed access. There is also access to the Internet through the University's wireless network. The students'/ technician's shared office space, which is 356 sq ft, has similar access and is equipped with four individual desks, four task chairs and four 2-drawer filing cabinets. *These facilities ensure that the PI and his immediate research team will have the necessary space in which to formulate experiments, analyze results, and prepare manuscripts for publication.*

Other:

- Flow Cytometry Core Facility located on same floor as the PI's laboratory. He has access by appointment on a fee-for-service, 24/7 basis. The facility contains a total of 800 ft², which is divided into two analytical suites and an adjoining room for sample preparation. The latter contains Zeiss bright-field, fluorescence, and phase-contrast microscopes, as well as a dissecting microscope and Conner desk-top centrifuge. The director of the facility, Michael Legge, is certified by Accuri, the maker of the cytometers in the facility (see *Equipment* section). A certified technician is available to assist investigators with use of cytometers, if needed. This core has been designated as a reference facility by the American Cytometric Society. *Availability of this core contributes greatly to the potential success of this project, which includes flow cytometry as a core analytical approach.*
- Intellectual/Collaborative Resources: The following are funded investigators in the PI's research environment who are doing research that is complementary to what is proposed here. *They provide invaluable constructive criticism and informal intellectual input, without which the proposed project would have far less chance of success.*

<u>INVESTIGATOR</u>	<u>AGENCY</u>	<u>GRANT NUMBER</u>	<u>TITLE</u>
Jennifer D'Espagne	NIH/NIAID	R01AIXXXXXX	Innate Immune Responses Limiting Nosocomial Infections
Patrick Hayek	NIH/NICHD	R01HDXXXXXX	Hospital Neonatal Infections and Their Prevention
Steven McMullins*	NIH/NIA	R34AGXXXXXX	Bacterial Complications of Healing Decubitus Ulcers
James Wherry	NIH/NIAID	R21AIXXXXXX	Bacterial Communities in Hospital-Derived Eye Infections
Geoffrey Teagarten	NIH/NCCAM	R01ATXXXXXX	Alternative Therapy for Nosocomial Staph Infections

* Dr. McMullins is appointed at the University of XXXXX, which is located in the same city fifteen miles from the PI's university. The PI and Dr. McMullins reciprocally attend each other's laboratory meetings on a bimonthly basis and are coauthors of several peer-reviewed publications (see Biographical Sketch). The other four investigators are members of the PI's department.