**Facilities, Equipment and Other Resources - Santa Fe Institute**

*Facilities*

The Institute's main campus at 1399 Hyde Park Road currently provides 23,500 square feet of facilities, surrounded by 32 park-like acres. SFI has retained all but a fraction of the site in this natural state as part of its commitment to creating an environment conducive to scientific research. The building includes a large conference room seating up to 75, several small meeting rooms, administrative offices for a staff of 25, computer facilities, library space and shared office space for up to 50 scientists. The Institute’s Tesuque Campus is located on 36 acres of largely undeveloped native bosque land. The Campus includes historic walking trails, a library space, and 2 small conference areas for working groups. The Institute’s campuses do not have dormitory facilities. Its various Schools are held at residential colleges in the area, usually at St. John’s College in Santa Fe where the students are housed.

*SFI Events Management Services*

These services are available to all workshop and working group activities held at SFI at no cost to the proposed project. Services include: issuing invitations, securing hotel rooms, arranging for catering and shuttles to and from hotel, handling travel reimbursements, issuing and analyzing post-event surveys.

*SFI Education Office*

The Institute’s Complexity Explorer and MOOC programs are supported by the Office of Education and offer an ever-increasing curriculum of online courses related to complexity science provided to a global audience. The creation and development of the “Origins” course(s) will be managed by the Program Manager of Online Education; steering committee member Paul Hooper, Director of Education, will also play an integral role in content presentation.

*Information Technology*

The Institute has a fiber-optic network backbone connecting two hundred multi-function network ports around the facilities. 200 Megabits (Mbps) of Internet connectivity connect this network to the outside world for high-speed data transmission and to encourage real-time collaborations.

Scientific computing resources at SFI include 10 SMP (symmetric multi processor) workstations and servers, 20 64-bit Linux workstations, several Windows-based workstations, and approximately 30 Macintosh workstations, most of which are used by the staff. Administrative computing resources consist of around 20 physical and virtual servers for use in hosting SFI's website, email services, and other communication and network-based requirements for keeping SFI "in touch" in today's technological world. SFI has added a 4-node, 256-core computational cluster to its research facilities to enable researchers to do intense and large-scale computations and data analysis.

The Institute provides hosted community services to its extended research community, educational alumni, international fellows, and corporate collaborators. Online portals provide a platform and tools to support and foster the exchange of scientific information among these constituencies, and webcasting and podcasting capabilities extend the reach of the Institute's research programs to a broader audience.

*Library*

The current library collection includes about 15,000 volumes - a collection which represents the research profile of SFI science. Researchers and staff have access to a variety of tools on the World Wide Web (such as First Search, Web of Science, JSTOR, and many others). In addition, the Library provides access to WorldCat, a database of over 50 million books in libraries worldwide. Library facilities are supplemented by subscriptions to hundreds of electronic journals as well as interlibrary loan arrangements nationwide. The Library works closely with regional science libraries including the Los Alamos National Laboratory and the University of New Mexico. Library staff provides complete support for researchers, including document delivery and research assistance.

*Collaborators*

Jonathan Chase: Prof. Chase has collaborated with our team throughout the conceptual development of our model. He is a leader in mechanistic theory for community assembly (attested by his recent book: Leibold, Mathew A., and Jonathan M. Chase. *Metacommunity Ecology*. Princeton University Press, 2017). He will help us ground our quantitative models in realistic biological interactions. Prof. Chase has also invited us to host working groups at the German Centre for Integrative Biodiversity Research (iDiv) where we will convene a group of international colleagues to improve, ground test, and troubleshoot our model.

Luke Harmon: Prof. Harmon has collaborated with our team throughout the conceptual development of our model. He is a leader in macroevolutionary models and will help to incorpeate the macroevolution of traits into our model. He will also participate in the iDiv working groups.

Data Carpentry: This organization has verified success in teaching large groups of students about the theory and application of data science. They will engage with us both to host a data science workshop and develop data science curriculum specifically for heterogeneous biodiversity data. This curriculum development will be done in concert with efforts supported by the Institute’s dedicated education personnel, including Director Dr. Paul Hooper.