

Development Committee Update
Prepared for SURA Board of Trustees Meeting
November 4-5, 2004

Major Activities Since April 2004 Board Meeting

1. INBRE Biomedical Networking Workshop
2. Southeast Technology Expo (biotech focus)
3. Other Technology Transfer Activities

INBRE (BRIN) Biomedical Networking Workshop

After hearing from Ron Johnson at the April 2004 SURA Board of Trustees meeting, the Development Committee Steering Group determined to pursue the next steps in creating a biomedical network for the Southeast. SURA staff engaged in numerous discussions with NIH NCCR leadership and the BRIN (now INBRE) researchers in our region. Ultimately, it was determined that a workshop hosted by SURA to discuss issues, gather information, and formulate a path forward was the appropriate course of action.

This workshop was held on July 29-30 at SURA Headquarters in Washington, DC (see Attachment 1: Agenda). Over 30 attendees, including INBRE representatives from each SURA IDeA state, NIH, Lariat, and SURA IT Programs, participated in the workshop (see Attachment 2: List of attendees). Presentations, small working groups, and large group discussion led to a very positive final outcome consisting of a Vision Statement and a Plan of Action, as follows:

Brief Vision/Purpose Statement

Enhance regional biomedical research capabilities by increasing access to grid infrastructure to:

- address health care issues of particular relevance to underserved populations in SE region
- enable advanced regional, national, and international collaboration between multidisciplinary research teams
- improve competitive position for increased funding for projects requiring advanced networking capabilities

Tasks

1. Create list of specific information to gather [COMPLETED]
2. Informal contact NCCR [COMPLETED]
3. Individual BRIN PI's: identify existing projects that would be strengthened by proposed grid, in these four areas: Neuroscience; cardiovascular; cancer; infectious disease; other "superstars" [COMPLETED]

4. SURA IT {Mary Fran}: prepare list of applicable resources
[COMPLETED]
5. BRIN PI's [w/bio/grid experts]: meet and select specific projects and get info back to SURA IT group [COMPLETED]
6. SURA IT {Gary}: determine connectivity and costs
7. Create preliminary proposals for internal review
8.
9. Submit proposal to NIH NCRR
10. Submit other proposals to other agencies/groups

Overall comments from the meeting indicate a keen desire to make this project move forward on the part of the INBRE researchers and a heightened level of appreciation for the IT strengths that we can provide. SURA is to continue to be intimately involved in this project. It should also be noted that other opportunities, both in networking and in biomedical research and technologies, may arise as offshoots from this initiative.

Sue Fratkin represented SURA at the follow-up meeting on October 17 in Washington, DC. The spreadsheet that had been compiled by the INBRE researchers of potential projects was discussed. It was determined that the most promising path forward would likely be to use this information to create a short, unsolicited planning grant proposal that will be submitted to NIH NCRR. This planning grant would provide funds for a short-term effort to gather further information about particular researchers in the region who are working on areas of biotech and biomedicine that would particularly benefit from a bio-network. SURA will continue to be involved in this project as it moves forward.

Southeast Technology Expo (biotech focus)

SURA was a Founding Sponsor of the Southeast Technology Expo (<http://www.southeastexpo.com>), a showcase of emerging technologies from across the Southeast that was created in order to forge new partnerships between universities and industry. The first Expo, "New Frontiers in Therapeutics: Emerging Technologies in Infectious Disease and Oncology", took place October 5-7, 2004 at the Sheraton Imperial Hotel and Conference Center in Research Triangle Park, North Carolina, and focused on three major biotech areas: Antiviral/antimicrobial therapeutics, Anticancer therapeutics, and Supporting technologies (drug delivery, bioinformatics, and genomics).

The event featured Pfizer as the Headline Sponsor. Total attendance was about 150 people. See Attachment 3 for Agenda. More details about the event include:

- Nearly 30 universities/labs signed up to participate, including almost 20 SURA member schools
- Over 100 abstracts submitted, 50 selected for formal presentations
- Several media partners established to help announce the event, including: MedAdNews, R&D Directions, Pharmalive.com, Drug Discovery World, Biotech Patent News, PharmExec, BioPharm International, and AUTM.

SURA received a great deal of publicity through this event, including: a prominently displayed booth; participation as a Moderator of one of the sessions; our name and logo were prominently featured on every item related to this event. To view any of the presentations, please visit www.southeastexpo.org and click on the "Login" link in the menu: user ID - SEExpo; Password - Expo2004.

Many of our schools expressed satisfaction and appreciation for this event as it gave them a focused showcase for their technologies. Next year's effort will aim primarily at bringing in an even greater number of industry participants. We will need to decide whether or not to renew our commitment to this event as a Founding Sponsor at the \$20k level again for the 2005 Event and will discuss this matter during the Development Committee meeting.

Other Technology Transfer Activities

In addition to the SE Tech Expo, numerous other activities have been taking place to build JLab tech transfer programs and to complement and expand our members' technology commercialization activities.

Girvan Collaboration / Startup Funding

Chief among these has been the expanding collaboration with the Girvan Institute in Santa Clara, CA. Specifically, two startup companies have already presented their company for funding to a panel of interested Silicon Valley Venture Capitalists, directly as a result of SURA's involvement. One, a biotech startup that has licensed UVA technologies in the field of chip-scale diagnostics, presented in July, and this has led to follow-on conversations with interested investors. The second presentation in August was from Luxxer Corp., the same company that licensed JLab-invented light guide technology from SURA one year ago. This event led to conversations not only with potential investors but also the Aerospace Corp., who is now engaged with Luxxer negotiating a joint R&D agreement. We anticipate having at least one company or technology per month, from either JLab or any of our universities, present at these forums, with upcoming meetings focused on nanotechnologies and IT.

The Girvan meetings in November will feature at least four separate SURA-related technologies and startups. The two-day event next week will focus on biotechnologies, and three separate technologies from two SURA schools will be presented at the Technology Showcase. Also at this event, a non-JLab SURA patent-pending biological technology will be presented by Matt. The Venture Capital meeting will also feature a startup company that has licensed technology from Florida Atlantic University. At the Development Committee meeting today we will discuss the renewal of our contract with Girvan to continue providing these services for SURA and our universities.

UVA Partnership for evaluating JLab technologies

Since this spring, we have been working with the University of Virginia Patent Foundation (UVAPF) on a technology transfer partnership. Specifically, SURA has

engaged with them to conduct market analysis and marketing efforts on selected JLab inventions in pursuit of licensing deals. Matt brought this opportunity to the JLab TRC, which decided to test the approach on three inventions. The results were quite satisfactory, so now we are pursuing a further working agreement. This partnership gives SURA a broad range of market expertise (UVAPF employs PhD-level scientists with business backgrounds as their licensing associates, one of whom conducted his research at JLab) at price levels well below market rates for consulting firms. If successful, it should result in a streamlined process and significantly increased success rate on creating valuable licensing agreements.

IP Management Software

After considering several solutions, SURA and the JLab TRC are considering purchasing a database package that would handle all of our intellectual property management. This package, called Inteum, is used by over 200 universities, government labs, and companies worldwide. It handles all aspects of invention disclosure management, including web-based inventor interfaces, CRADA and WFO agreements, patent management, licensing payments, marketing efforts, and the like. Additionally, UVAPF also uses this software and could easily interface with the SURA/JLab system. We are currently investigating and should have a decision before the November board meeting. This will significantly increase our ability to track IP, as the current system involves spreadsheets and paper trails.

Involvement in Tech Transfer Community

Matt has been actively participating in the technology transfer communities of both the national laboratories and the universities across the country. This has involved participation in the Southeast Tech Transfer Directors Meeting (universities), Technology Partnership Working Group (DOE labs), NSF SBIR terahertz review board, and numerous other forums. The net result is that SURA's name is becoming more well-known in these communities and we are beginning to be recognized as providing unique connections and opportunities for schools to commercialize their technologies that would not otherwise be available.

Attachment 1: SURA INBRE Workshop Agenda (July 29-30, 2004)

Thursday morning

8:00 Continental breakfast (at SURA meeting site)

8:15 Welcome (SURA)

8:30 Introductions

9:00 Background Briefings

- INBRE Researchers Programs
- NIH – NCRR, LARIAT
- SURA – networking initiatives
- Lariat (Gwen Jacobs, Programmatic Lead for Lariat Project – progress to date; lessons learned)
- BRIN/INBRE South – Activities
- Networking

11:45 Working Group assignments and tasks

12:00 Lunch

Thursday afternoon

12:30 Working Groups/ Working Lunch

Discussions focus on answering attached questions

- What are specific, NIH-relevant applications that a biomed network would enable?
- What are the key points for success of such a project? Potential causes of failure?
- What is the significance, innovation, or unique application of the proposed projects?
- What network and IT resources are available, and what are required, for projects?
- How could access to unique populations, data sets, equipment, or facilities in your region be enabled by a network?
- What peripheral connections within and among the states could be made?
- What could you do if you had unlimited bandwidth at zero cost? (dream big)

3:15 Break

3:30 Group Presentations

5:30 Overview/Recap- Key items

6:30 Reception and Dinner at Hotel (Hamilton Crowne Plaza)

Friday morning

8:00 Continental breakfast (SURA)

8:15 Review and agenda for today

8:45 Group discussion and formulation of Vision Statement and action plan timeline

11:30 Formulation of Next Steps

12:00 Meeting Adjourned

Attachment 2: List of SURA INBRE Attendees

| State | Role | BRIN Institution | Name |
|----------------|---------------|--|--|
| Arkansas | BRIN Lead | University of Arkansas for Medical Sciences | Lawrence E. Cornett |
| DC | SURA IT | Georgetown U. / Chair of SURA IT Committee | Dave Lambert |
| Delaware | BRIN Lead | University of Delaware | David S. Weir |
| Delaware | University IT | University of Delaware | Dean Nairn |
| Delaware | University IT | University of Delaware | Susan Foster |
| Kentucky | BRIN Lead | University of Louisville* | Nigel G.F. Cooper |
| Louisiana | University IT | Louisiana State University | Charlie McMahon |
| Louisiana | BRIN Lead | Louisiana State University | Everett (Bill) Wischusen |
| Louisiana | Other | Louisiana State University Board of Regents | Harold Silverman |
| Louisiana | SURA IT | Tulane / Co-Chair of SURA's HPC/Grids Planning Group | Jed Diem |
| Louisiana | Other | Louisiana State University Board of Regents - FedGov't | Paul Gravel |
| Mississippi | BRIN Lead | University of Southern Mississippi | George M. Santangelo |
| Mississippi | Other | University of Southern Mississippi | Mohamed O. Elasri |
| NIH | NIH | NCRR | Peter Highnam |
| North Carolina | SURA General | Duke U. / Chair of SURA Development Committee | Jim Siedow |
| Oklahoma | BRIN Lead | University of Oklahoma Health Sciences Center | Frank J. Waxman |
| Oklahoma | University IT | Vice Chancellor for Information Technology and Telecommunication | Kurt Snodgrass |
| Puerto Rico | BRIN Lead | University of Puerto Rico* | Fernando A. Gonzalez |
| Puerto Rico | Other | University of Puerto Rico High Performance Computing Facility | Guy Cormier |
| South Carolina | University IT | University of South Carolina | Bill Hogue |
| South Carolina | Other | Bioinformatics Core Director, USC | John Rose |
| South Carolina | BRIN Lead | University of South Carolina | John W. Baynes |
| SURA | SURA IT | SURA | Don Riley |
| SURA | SURA IT | Louisiana State University | Ed Siedel |
| SURA | SURA IT | SURA | Gary Crane |
| SURA | SURA General | SURA | Greg Kubiak |
| SURA | SURA General | SURA | Jerry Draayer |
| SURA | SURA IT | SURA | Mary Fran Yafchek |
| SURA | SURA General | SURA | Matt Thomas |
| SURA | SURA IT | SURA | Sue Fratkin |
| Washington | Other | Lariat Project, Programmatic Lead | Gwen Jacobs |
| West Virginia | Other | Marshall IT (ACoRN) | Jan Fox |
| West Virginia | BRIN Lead | West Virginia University | Jim M. Sheil |
| West Virginia | BRIN Lead | Marshall University* | old: Howard Aulick new: Dr. Gary Rankin |

Attachment 3: Southeast Technology Expo – Agenda

5 October 2004

6:00pm-8:00pm Welcome Reception and Registration

6 October 2004

7:00am-8:00am Breakfast and Registration

8:00am-9:15am Welcome and Keynote Address

Keynote Address: [James M. Hughes, M.D., Director, National Center for Infectious Diseases](#)

Centers for Disease Control and Prevention

New Opportunities in Emerging Infectious Disease Research

Track 1—Anti-Microbial Therapeutics

Antibiotic Composition from *Alcaligenes Genus*

University of South Carolina

Antimalaria Applications for Carbonic Anhydrase Inhibitors

University of Florida

Immunogenic Compositions Comprising *Porphyromonas Gingivalis*

Protease and/or Peptides

University of Georgia

Track 2—Cancer Therapeutics

Natural Product Extracts and Compounds Inhibiting Cellular Responses to Hypoxia

University of Mississippi

Potent Anti-Tumor Effects of an Active Site Mutant of Human Manganese-Superoxide Dismutase: Evolutionary Conservation of Product Inhibition

University of Florida

FC101 as a Composition and Method for Cancer Treatment

University of South Carolina

10:40am-11:10am Break / Exhibits Open

Track 1—Anti-Microbial Therapeutics

Synthesis and Evaluation of Nitrofuranyl Amides as Novel Inhibitors of UDP-Gal Mutase and New Antituberculosis Agents

University of Tennessee

Broad Spectrum Antibacterial Peptides of Human Cathepsin G

University of Georgia

Hydroxamates as Antimicrobial Agents/Protein Structure for Drug Design—DadX

Track 2—Cancer Therapeutics

Novel Small Molecules Targeting Hypoxia-Inducible Factor (HIF) for Cancer Therapy

Emory University

Potent Small Molecule Inactivators of DNA Alkyltransferase

National Institutes of Health

The AP4 Center and the Development of Novel Cancer Therapies

St. Jude Children's Research Hospital

12:15-1:30pm

Lunch / *Exhibits Open*

Track 1—Anti-Microbial Therapeutics

Adhesin-Specific Nanoparticles

Clemson University

A Streptococcal Vaccine Using Serum Opacity Factor (SOF) and Peptides of SOF

University of Tennessee

Identification of Inhibitors of *P. Aeruginosa* Intercellular Signaling

East Carolina University

Complement Receptor 2 Heteropolymer Drugs for Use as Vaccines

University of Virginia

Track 2—Cancer Therapeutics

Interleukin 24 (MOB-5/MDA7) as a Cancer Marker and Target for Anticancer Drugs

Vanderbilt University

Chimeric Molecules and Methods of Use

University of Miami

Solid Cancer Tumor Therapy and Diagnostics

Florida Atlantic University

Superantigen Enhancement of Specific Immune Responses Against Cancer and Infectious Diseases

University of Florida

3:00pm-3:30pm

Break / *Exhibits Open*

Track 1—Drug Delivery Systems

Adhesives for Vascular Grafts Providing Timed Release of Drugs

University of Tennessee

Self-Assembled Thin Film Coating to Enhance the Biocompatibility of Materials

Virginia Tech University

Transdermal Delivery of NSAIDs

University of Georgia

Bioadhesive Film Technology and Vaccine Delivery Systems
University of Mississippi

Track 2—Cancer Therapeutics

Combination of Breast Cancer Therapeutics

University of Virginia

Compositions and Methods for the Intracellular Disruption of VEGF and KDR by RNA Interference and Intraceptors

Medical College of Georgia

Therapeutic Agents Containing Gamma Hydroxylated Amino Acids

Florida Atlantic University

5:00pm-7:30pm

Exhibits Open

5:30pm-7:30pm

Grand Reception

7 October 2004

7:00am-8:00am

Breakfast and Registration / *Exhibits Open*

8:00am-9:00am

Welcome and Plenary Session

Keynote Address:

[Garheng Kong MD, PhD, Partner](#)

Intersouth Partners

Navigating the Path From Science to Commercialization

Track 1—Assays and Tools

Detection of CYP3A5 Inactivation

St. Jude Children's Research Hospital

Detection of Small Molecular Weight Chemicals Using Nanoparticle-Based Radioimmunoassay

Clemson University

Chemoselective Fluorogenic Molecular Linkers

University of South Carolina

Track 2—Cancer Therapeutics

Methods of Modifying Behavior of CD9-Expressing Cells

University of Tennessee

Damage Endonuclease (UVDE) - Repair of DNA Damage

Emory University

Cancer Vaccine

University of Miami

10:20am-10:50am

Break / *Exhibits Open*

Track 1—Assays and Tools

Restoring Cardiac Muscle Function with RNA

Florida Atlantic University

New Method of Cancer Screening and Detection

East Carolina University
Maturing Bioinformatics Technologies for Therapeutics
RTI International
A Novel Method to Modulate Inflammation
Medical College of Georgia

Track 2—Anti-Viral Therapeutics

Novel Entry Inhibitors of Pathogenic Paramyxoviruses
Emory University
High-Yield Interferon-Tau Gene
University of Alabama—Birmingham
Materials and Methods for Treating Autoimmune Disease
University of Florida
Method of Inhibiting Viral Infection Using HMG-CoA Reductase
Inhibitors and Isoprenylation Inhibitors
Vanderbilt University

Noon-1:30pm

Lunch / Exhibits Open

Track 1—Supporting Technologies

ATM Kinase Assay
St. Jude Children's Research Hospital
UAB Patented Therapeutics to Treat Fibrotic Disease Resulting from
Complications of Diabetes and Hypertension
University of Alabama—Birmingham
Glucose-Dependent Insulinotropic Peptide for Use as an Osteotropic
Hormone
Medical College of Georgia
Virtual Slide Technology
Centers for Disease Control and Prevention

Track 2—Anti-Viral Therapeutics

VU9849: Inhibition of Viral Infection and Spread with Viral and RhoA-
Derived Peptides
Vanderbilt University
Novel Treatment of Human Influenza Virus Infections
University of South Carolina
Reverse Genetics
St. Jude Children's Research Hospital
A Target for Antifungal Agents
University of Miami

3:00pm

Expo Adjourns