

Supporting the Other Researchers

Broadening the Reach Workshop

Raleigh, NC

09/04/14 – 09/05/14

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Who Needs Support and Access

Small number of HPC/Networking faculty/researchers

Majority of faculty could use HPC, High Performance Networking – but don't know how it can help them!

Big Data is expanding peoples views and needs

Federal requirements pushing campuses and researchers to share

Research projects more multi-everything

SO:

- What type of access and support is needed?

or

- What is a CIO to do?

Educause Top-Ten IT Issues, 2014

Improving student outcomes through an institutional approach that strategically leverages technology

Establishing a partnership between IT leadership and institutional leadership to develop a collective understanding of what information technology can deliver

Assisting faculty with the instructional integration of information technology

Developing an IT staffing and organizational model to accommodate the changing IT environment and facilitate openness and agility

Using analytics to help drive critical institutional outcomes

Changing IT funding models to sustain core service, support innovation, and facilitate growth

Addressing access demand and the wireless and device explosion

Procuring technologies and services at scale to reduce costs (via cloud, greater centralization of institutional devices and systems, cross-institutional collaborations, and so forth)

Determining the role of online learning and developing a strategy for that role

Implementing risk management and information security practices to protect institutional IT resources/d
Respond to regulatory compliance mandates*

Developing an enterprise IT architecture that can respond to changing conditions and opportunities

Partnering/Collaboration is the Key

Campus IT departments have deep expertise:

- HPC, Networking, storage, automation, integration, etc.
- IT needs to support campus mission (research team members)
- Offer services that meet the needs of the institution
 - HPC outreach & support
 - Big Data partnerships (SURA/ARL Best practices document: http://www.lib.ua.edu/wiki/sura/index.php/A_Step-By-Step_Guide_to_Data_Management)
 - Integration of tools, data formats, query help, analytics, ...
 - New classroom environments (<http://scaleup.ncsu.edu/>)

How do faculty & staff find partners, support and resources?

- ReachNC.org (example of expert database)

Partnering is a “contact sport”

Scale-Up Classroom



David Hinks

NCSU, College of Textiles, Textile Engineering, Chemistry & Science

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David Hinks

Organizations

North Carolina State University

College of Textiles

Textile Engineering, Chemistry & Science

North Carolina State University

Centers, Institutes, and Special Programs

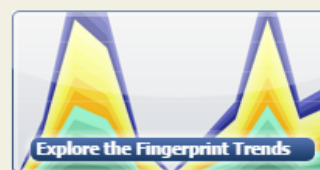
Forensic Sciences Institute

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Fingerprint Trends



Research Network



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1. Jon Rust; David Hinks; Saad Khan; Marian McCord; Julie Willoughby
Information Not Available
8/1/2013 - 7/1/2016
Sponsor: Information Not Available
Funding: \$ 1,211,327.00
2. David Hinks; Peter Hauser
Information Not Available











Publications [more >](#)

1. Sha Fu; David Hinks; Peter Hauser; Mary Ankeny
2013
High efficiency ultra-deep dyeing of cotton via mercerization and cationization
Cellulose. 2013;20(6):3101-3110.
2. Kristin H. Cochran; Jeremy A. Barry; David C. Muddiman; David Hinks
2013
Direct analysis of textile fabrics and dyes using infrared matrix-assisted laser desorption electrospray ionization mass spectrometry
Analytical Chemistry. 2013;85(2):831-836.
3. Ahmed A. Fadda; Rasha E. El-Mekawy; Ahmed El-Shafei; Harold S. Freeman; David Hinks; Manal El-Fedawy
2013
Design, synthesis, and pharmacological screening of novel porphyrin derivatives
Journal of Chemistry. 2013.





Institutional Network [more >](#)

Profiled Organizations	Shared Pub.
 College of Textiles	13 
 Textile and Apparel, T...	3 
 Chemistry	2 
 Electrical and Compute...	1 
 Engineering Research	1 


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	Publications
 Renzo Shamey	75 
 Warren J Jasper	50 
 Harold S Freeman	145 
 Peter J Hauser	105 
 Ahmed Mohamed El-S...	49 

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	Publications
 Coloration Technology	15
 AATCC Review	10
 Dyes and Pigments	6
 Color Research and Ap...	6
 Cellulose	4

Coauthor Network [more >](#)

Profiled Coauthors	Shared Pub.
 Renzo Shamey	23 
 Harold S Freeman	13 
 Peter J Hauser	11 
 Ahmed Mohamed El-S...	10 
 Keith R Beck	4 

New Challenges

Security compliant environments

- Fed grants require NIST compliance
- Developing on-demand environments for faculty research
 - VCL (vcl.ncsu.edu), SDN, logging, separate networks
 - Basic capability, charge for extended needs

Free (Click wrap) access to services – causing huge diversity of SaaS

Data security requirements and “borderless” networks

Storage demands and access requirements of new research & teaching

Technology does not drive change
it enables change.

~ Source Unknown ~