What Faculty Members Want From a Research Information System

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and

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Faculty are not simply “end users” of these systems.

• **We create the content** by proposing novel ideas, doing original research and presenting the results in the context of what has been done before.

• **We enhance the quality** of the work and influence its future direction by providing peer review of proposals and manuscripts.

• **We determine the impact** of the work via our citations and by other means.
Benefits of consulting with faculty in developing information systems

“Our key finding seems obvious in retrospect: what faculty members and university researchers want is to do their research, read and write about it, share it with others, and keep up in their fields. [They] complain of overwork, resist clerical responsibility, and resent any additional activity that cuts into their research and writing time.”

“The phrase "if you build it, they will come" does not yet apply to IRs. While their benefits seem to be very persuasive to institutions, IRs fail to appear compelling and useful to the authors and owners of the content. And, without the content, IRs will not succeed...”

“Keeping online profiles up-to-date should require little or no effort and be integrated into the scientist’s existing workflow...researchers must have an incentive to supply the information and keep it current. “

“[Faculty] regularly invested time updating information in their biographical and professional documents, such as their CV’s, biosketches for grants, and faculty evaluation forms. They were highly motivated to do so because these documents must be up-to-date in order to obtain grant funding, provide background information when invited to lecture or consult, and participate in university evaluations such as promotion and/or tenure decisions. There is no such motivation to update online profiles.”

Methods

• Four, one-hour focus groups consisting of three to five faculty members were led by the authors, a biomedical researcher and an expert on usability.

• Junior faculty members were selected because they had expressed the greatest need for these systems and because they will be the major users.

• We generated a list of potential benefits from a research information system and a list of problems encountered with the existing systems.
Information systems discussed

- Community of Science (used until 2008)
- Research Profiles (Gulf Coast Consortia)
- VIVO (Cornell University)
- Digital Vita (University of Pittsburgh)
COS Workbench - Mozilla Firefox

Manage Your Profile

- Contact Information
- Current Positions
- Publications
- Qualifications
- Experience
- Other Expertise
- Future Research
- Industrial Relevance
- Additional Terms
- Documents
- Memberships
- Awards
- Previous Positions
- Patents
- Funding Received
- Grants
- Books
- Chapters in Books
- Conference Proceedings
- Other Outputs

Export Your Profile

- Produce a CV
- Produce an NIH PHS 398 Form

Manage Your Account

- Change Your Username/Password
- Delete Profile
- Update PWE Preferences

Help

- University of Texas Health Science Center at Houston Liaison: David.S.Bustida@uth.tmc.edu
- Workbench FAQ
- COS Help Desk

News & Tips

- RefWorks-COS has a just launched a new website, www.reworks-cos.com, which includes links to Training schedules and a NEW Resource Center. Explore it today!

- Training is always available with ReWorks-COS live or recorded training webinars. View the options and schedule now at www.reworks-cos.com/training.

Your Saved Funding Searches

Saved Searches is a service that allows COS Funding Opportunities customers to store and re-run queries. This service is also the basis for COS Funding Alert - a weekly email notification service of personalized funding information.

COS Funding Alert is an optional service available to organizations that subscribe to COS Funding Opportunities. Your organization either does not subscribe to COS Funding Opportunities or does not subscribe to the COS Funding Alert service.

If your organization does subscribe to COS Funding Opportunities and COS Funding Alert, and you believe that you have received this message in error, please contact our help desk.

If your organization does not subscribe to these COS services but is interested in learning more about them, you can request more information.

Your Tracked Records

Tracked Opportunities is a service that allows a user to monitor specific COS Funding Opportunities. The information is drawn from COS Funding Opportunities, the world’s largest funding database with over 23,000 records of grants, awards, fellowships and other funding opportunities across the globe and in all disciplines.

If your organization does subscribe to COS Funding Opportunities and you believe that you have received this message in error, please contact our help desk.

If your organization does not subscribe to these COS services but is interested in learning more about them, you can request more information.

Your Profile

Your full COS profile may be searched and viewed only by COS Expertise subscribers. You may also share your profile with anyone you choose using your MyProfile view at http://myprofile.cos.com/marshak069.

Customize your MyProfile now.
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Qualifications
Postdoctoral, Harvard University, Neuroanatomy, 1984.
Ph.D., University of California, Los Angeles, Anatomy, 1982.

Expertise and Research Interests
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Other Expertise
Academic Experience:
Fellow, Grass Foundation, 1984
Editorial Reviewer, Brain Research, Experimental Eye Research, Vision Research, Visual Neuroscience
Grant Reviewer, Veteran’s Administration, National Science Foundation, National Institutes of Health

Business Experience:
Advisory Board, Research in Minority Institutions Program, Texas A&M University, Kingsville

Keywords
COS Keywords:
Friends follow each other on Facebook. And soon, academic scientists eager to forge cross-disciplinary collaborations will have their own network: VIVO.

Funded by a $12.2-million grant from the US National Center for Research Resources, VIVO aims to allow researchers to transcend disciplines and tap into the collective resources needed to facilitate breakthrough discoveries.

Nature 462, 123 (5 November 2009)
VIVO is a research-focused discovery tool

Browse or search for information about Cornell faculty and staff across all disciplines, departments and colleges.

Search VIVO

Making Headlines

CU physicist to use stimulus funds to study electron beams

Determining the brightness limits of electron beams in X-ray synchrotron radiation facilities will be the focus of a five-year research project by assistant professor of physics Ivan Bazarov

Features: Ivan Bazarov
Feb. 15

Bacteria ‘trending’ wreaks havoc in GI diseases

Cornell scientists have discovered that the bacterial protein VpsT serves as the master regulator in the bacteria Vibrio, which is the cause of cholera and other enteric diseases.

Features: Marcos Navarro
Feb. 23

Upcoming Seminars

Tuesday, Mar. 16 2010
12:00 PM Democracy and the African Middle Class, in Comparative Perspective

Tuesday, Mar. 30 2010
12:00 PM TBA - ISS Persistent Poverty and Upward Mobility seminar

Thursday, Apr. 1 2010
7:00 PM More than Just Race: Being Black and Poor in the Inner City

Tuesday, Apr. 6 2010
12:00 PM TBA - ISS Persistent Poverty and Upward Mobility seminar

Wednesday, Apr. 7 2010
5:00 PM Seminar: John (Jay) Lemons, MD
Welcome to Digital Vita

Digital Vita is a module of the Research Gateway suite of tools designed to perform these functions:

**Manage your CV and NIH biosketch:** Using Digital Vita, you can enter and edit your complete CV information, and create and maintain multiple versions of HSC-standard CVs and NIH biosketches. In addition, you can create and edit an online profile.

**Automatically import data from external sources and propagate publications to your co-authors:** Digital Vita automatically acquires updates to your CV from MEDLINE and lets you review, approve or reject them. In addition, papers co-authored with Pitt colleagues have to be entered only once; Digital Vita automatically propagates entries to all authors.

To access Digital Vita, you will need an HSCConnect account. If you have an account already, simply *Sign In*. Otherwise, please see the HSCConnect page for information about HSCConnect and creating an account.
C. Selected peer-reviewed publications

Most relevant to the current application


Additional recent publications of importance to the field (in chronological order)


D. Research Support

On-going Research Support

EV06472 (David Marshak) 05/01/09 - 09/30/11
National Eye Institute
Retinoplastic axons of mammalian retinas
Role: PI (sole)

RO3022 07/01/10 - 06/30/11
Temple Foundation
Implementing and evaluating the use of distributed practice and self-testing in the classroom
Subcontract with Rice University
Role: Co-Investigator

NS06431 (David Marshak) 07/01/09 - 09/30/14
National Institute of Neurological Diseases and Stroke
Short Term Training in Neuroscience
Role: PI (sole)

A. Personal Statement

The goal of our research is to describe the neural circuits in primate retina at the level of synaptic connections between identified populations of cells. Specific types of retinal neurons will be based on their morphology, their amino acid signatures and their patterns of activity dependent labeling using serial, semithin sections through the nuclear layers of baboon retinas. Their processes will be reconstructed from serial electron micrographs of the plexiform layer and their synapses described. My interest in this problem dates back to my undergraduate years at Cornell University, when I began studying the evolution of primate color vision. I now have over 30 years of experience with the types of correlated light and electron microscopic approaches to retinal anatomy that will be used in this project, beginning as a graduate student with Dr. William K. Stell at UCLA. I began working with primate retina as a postdoctoral fellow with Dr. John E. Dowling at Harvard University in 1983, and have had extensive experience with techniques used in the proposed experiments. I have been an independent investigator since 1984, and have supported my research with grants from the National Institutes of Health and the National Science Foundation. Most of my time has been devoted to neurons that branch in the inner plexiform layer, but I have recently begun studying neurons branching in the outer plexiform layer, as well. I have been fortunate to collaborate with some of the leading investigators in this field over the years. In carrying out the proposed experiments, I will rely on an experienced team in my own laboratory and a network of colleagues here in Houston and elsewhere who study neural circuitry in the retina.

B. Positions and Honors

Positions and Employment
9/12/2001 - Present Professor, Neurology and Anatomy, University of Texas Health Science Center, Houston, TX

Other Experience and Professional Memberships
1978 - Present Association for Research in Vision and Ophthalmology
1978 - Present Houston Chapter Representative, Society for Neuroscience

Honors
2/1/2010 - Present Fellow of the Association for Research in Vision and Ophthalmology
Benefits of information systems

• Find collaborators.
• Recruit students and fellows.
• Locate resources.
• Identify funding sources.
• Prepare grant applications.
• Produce documents.
Other possible applications:

• Compliance
• Accreditation
• Training programs
• Equipment grants
• IACUC forms
• IRIS/IRB forms
• Web pages
• Biosketches
• *Curriculum vitae*
• Annual reviews
• Grant documents
• Philanthropy
Disadvantages of information systems

- Databases are incomplete, inaccessible or outdated.
- Systems are hard or time-consuming to use.
- Information is available elsewhere.
- Outputs are not in a useful form.
- Other institutions are not accessible.
- Privacy, confidentiality and priority concerns.
Conclusions

• Faculty members should be consulted early and often about the design and implementation of research information systems.

• Information, by itself, is not sufficient; there should be tangible output in a form useful for us.

• Additional clerical work would be very unpopular.

• Privacy, confidentiality and maintaining priority in scientific discoveries are also major concerns.
Acknowledgements

Dr. Peter Davies, Office of Research, University of Texas Health Science Center at Houston

Faculty participants in focus groups

Drs. Titus Schleyer and Medha Devare