

Update on Scanning

**Presented at the eRA Project Team
Meeting of Tuesday, December 11, 2001**



Overview

- **The People**
- **The Quotes**
- **The Rules**
- **The Process**
- **The Vision**
- **New Business Practices**



The People

- **PR Man:**

- ▶ **Steve Hausman (i.e. Group Advocate)**

- **The Ones Who Actually Do the Work:**

- ▶ **Mike Cox**
- ▶ **Dave Carter**

- **The Steering Committee:**

Aisquith, Jeff
Bradley, Eileen
Cain, Jim
Diggs, Gene
Fisher, Suzanne
Fitzgerald, Steve
Hagan, Ann
Hahn, Marcia
Hausman, Steve

Kelty, Miriam
Lewis, Marguerite
Lieberman, Ellen
Lovelace, Debbie
Lowman, Chris
McGowan, John (JJ)
Milman, Gregory
Onken, James
Panniers, Richard

Richters, John
Ruiz Bravo, Norka
Sommers, David
Srinivas, Ranga V.
(RV) Stanfield, Brent
Streufert, Susan
Swidersky, Chris
Swidersky, Scott
Vener, Kirt.....



The Quotes

- **When the only tool you have is a hammer, there seem to be a lot of nails around**
 - Traditional proverb
- **The times they are a changin'**
 - Robert Zimmerman
 - (aka Bob Dylan)



The Rules

- **Rule #1 - We are currently, and will continue to be, in a state of transition for the foreseeable future.**
- **Rule #2 - Transitions are hell.**



What is Scanning

- **Scanning, in its simplest form, is the conversion of a paper document in to an electronic image.**
- **This image may have additional features added, such as optical character reading, bookmarkmarking and hyperlinking**



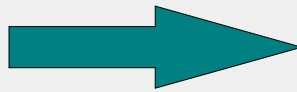
Why Scan

- **Scanning saves paper**
 - One CD versus boxes of paper
- **Scanning enables rapid transmission**
- **Scanning facilitates storage**
- **Platform independent**



The Current Process for Applications

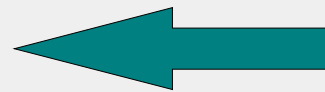
Paper applications
received by CSR



Paper applications
copied and distributed to
study sections and ICs



Paper applications
sent to reviewers



Paper applications
returned to NIH



Paper applications
filed in each IC



One Result of the Current Process: The Paper Intensive Office



Another Result of the Current Process



What We Can Expect? - 1

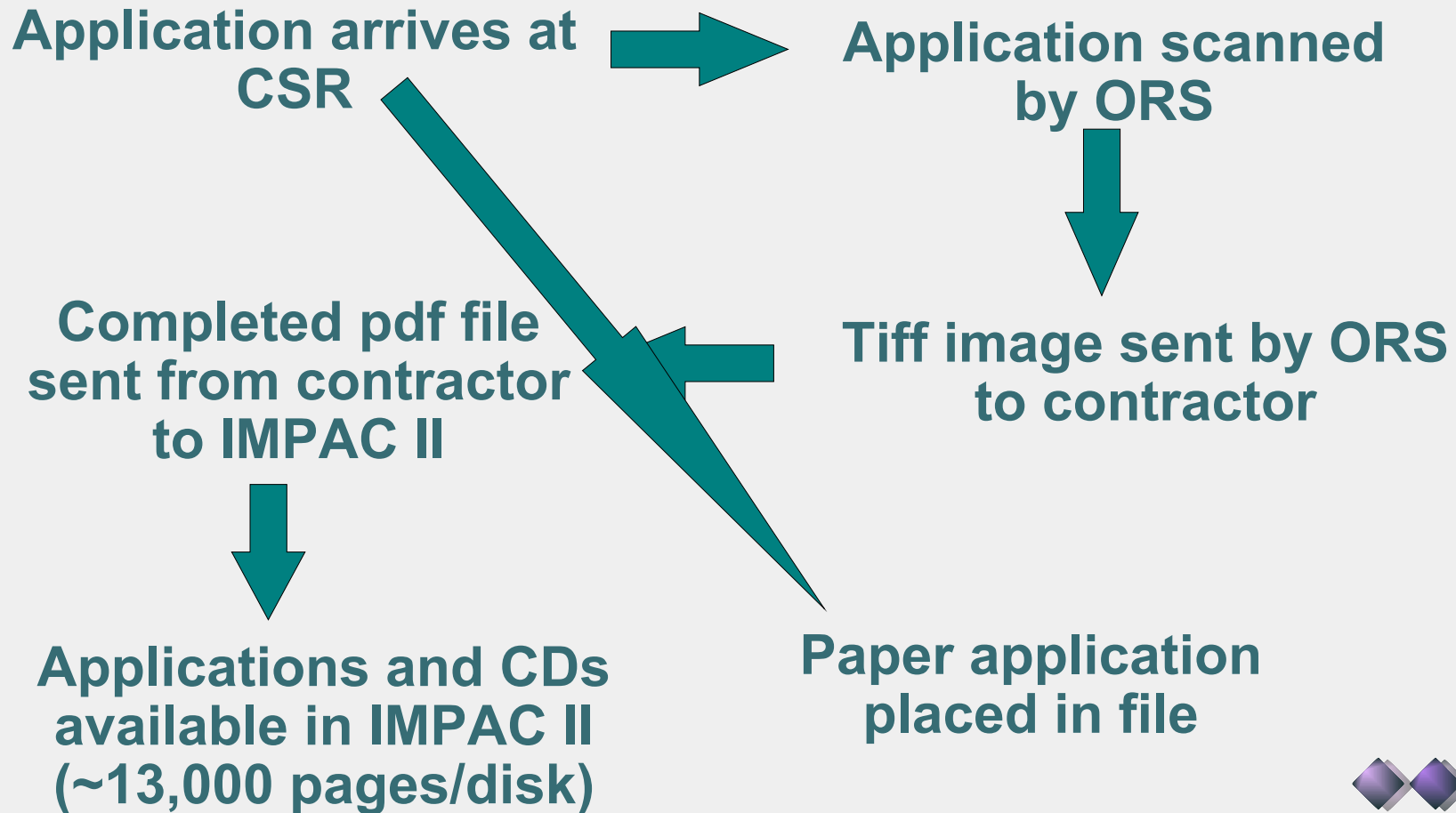
Beginning Calendar 2002

- Scanning as an interim solution to electronic application submission
- All applications arriving at NIH in CSR will be scanned, captured, bookmarked and searchable
- CDs will be provided for review purposes (ordered via IMPAC II)
- All pdf images viewable in IMPAC II



The Intermediate Process for Applications

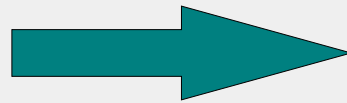
Beginning January, 2002



The Future Process for Grant Applications

Beginning 2003

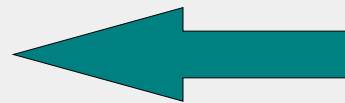
**eGrants received via
the Commons**



**Data captured and
images formed**



**Images available to
reviewers and staff**



**Electronic review at
all levels**



**Electronic storage of all
records**



Changing Business Practices for eGrants

The Result of a Total eProcess



Changing eBusiness Practices

- **The ability to work with images instead of paper can affect greatly the way we do business**
- **Many questions and issues, but perhaps not so many answers**



The Questions - 1

- What are we doing to prepare for e-Business?
 - Short Term
 - Long Term
- What should we do with our paper files?
- Should standards be set for eFiles for the ICs?
- Should files be stored in the IC or the enterprise?

Enterprise Storage

At least for legacy applications



The Questions - 2

- **What are the archival issues involved?**
 - **Record retention**
- **What do we do with old files (i.e. disposal)?**
- **What about items that come in apart from the application?**
 - **Letters and other correspondence**
 - **E-mail**
 - **Phone messages**



The Questions - 3

- Which items are “FOIable?”
 - How do we redact from eFiles?
- What are the issues related to “shadow” files maintained by program staff?
- What are the issues related to file stability and format? (The “8-track dilemma.”)
- What are the issues related to image quality?



The Questions - 4

- **Should all applications be placed on a website?**
 - **Bandwidth Issues**
 - **Connection Speed Issues**
- **Should the NIH continue to be a paper environment?**
- **Apart from grants, what are the document management issues?**
- **Who pays for all of this stuff???**

**Enterprise
Initially**



The Questions - 5

- For applications, how do we handle Conflicts of Interest?
 - Digital Rights Management
- Do program staff get CDs?
- Can applications be eliminated from the grants folder and stored centrally instead?
- What are the training requirements for staff?
 - i.e., burning CDs



The Questions - 6

- **Can we use eBooks?**
 - ▶ **Size and weight of hardbacks**
 - ▶ **Near Print-quality display**
 - ▶ **Very large capacity possible**
- **Use of Instructional CDs?**
- **Organic Light Emitting Diodes?**
 - ▶ **Very bright; wide viewing angle**
 - ▶ **Long life**
 - ▶ **Very thin; flexible**
 - ▶ **Extremely high resolution**
 - ▶ **Can handle video display**



The Questions - 7

- **Using Digital Paper**
 - ▶ **Electronically addressable paper-page displays that use real paper substrates**



Simulation of the motion of a pixel

Reversible paper demo



What Can We Expect? - 2

- **Given the new tools that are available, what can be done to enhance, streamline and otherwise modify our work procedures?**
- **What will we be able to do in the future that we cannot do now?**
 - ▶ **Sharing (& group editing) Documents**
 - ▶ **Electronic Stapling**
 - ▶ **On-line Editing**
 - ▶ **eForms**



One New Tool: The H-P Digital Sender



- **Compact Size**
- **Converts paper to pdf image**
- **Connected to the Internet**
- **Documents can be scanned, filed, stored and sent**





National Institutes of Health
National Institute of Arthritis and
Musculoskeletal and Skin Diseases
Bethesda, Maryland 20892

31 Center Drive MSC 2350
Telephone: 301-496-4353
FAX: 301-480-6069

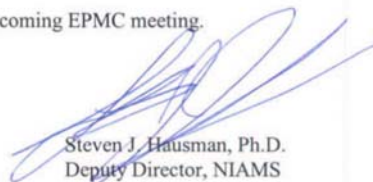
November 23, 2001

To: EPMC Members
From: Group Advocate for Scanning
Subject: Scan, Scan, Scan

We know that scanning will become more commonplace in the coming years. There are a lot of questions in this regard.

- Are we prepared to deal with it?
- Do we know the pros and cons?
- How much will it cost?
- Should we convert our files to electronic format?
- What do we do with the old files?
- Who will pay for all of this?

These questions and more will be discussed at an upcoming EPMC meeting.



Steven J. Hausman, Ph.D.
Deputy Director, NIAMS





National Institutes of Health
National Institute of Arthritis and
Musculoskeletal and Skin Diseases
Bethesda, Maryland 20892

31 Center Drive MSC 2350
Telephone: 301-496-4353
FAX: 301-480-6069

November 23, 2001

To: EPMC Members
From: Group Advocate for Scanning
Subject: Scan, Scan, Scan

We know that scanning will become more commonplace in the coming years. There are a lot of questions in this regard.

- Are we prepared to deal with it?
- Do we know the pros and cons?
- How much will it cost?
- Should we convert our files to electronic format?
- What do we do with the old files?
- Who will pay for all of this?

These questions and more will be discussed at an upcoming EPMC meeting.



Steven J. Hausman, Ph.D.
Deputy Director, NIAMS



Changing Business Practices for eGrants

The EPA/FDA Story

- The EPA wishes to establish a standard for electronic records that are kept to comply with the laws it administers. **What are the NIH issues related to electronic records?**
- EPA records, however, need not be stored electronically. But, like the FDA, anything that was ever on a computer is considered to be an electronic record.



NIH eRecords Issues

- Technology
- Cost
- Consistency/Uniformity across agencies
- Archiving
- The Records Control Schedule
- Legal Issues

**Tobacco
Litigation!**



Changing Business Practices for eGrants

And now a demo...

