

Institutional Repositories: Issues and Challenges

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Institutional Repositories

- IR Movement
- Scholarly Communications in General
- Technologies Used



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IR Movement

- The main purpose of an institutional repository is to house and preserve the intellectual output of a University, Department, or Campus Organization. The repository also increases access to and expands the visibility of the university's scholarly output.



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Why Do we need IR's?

- Showcase and preserve scholarly output and historic documents
- Allow faculty to self-archive post-prints, preprints, and extra materials
- They can be used to support teaching and learning
- They provide a stable environment for the preservation of born digital materials



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Just what goes into an IR anyway

- Pre-Prints
- Post-Prints
- Working Papers
- Datasets
- Supplementary Materials
- Learning Objects
- Other Stuff...



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Scholarly Communications in General

Scholarly communication is the system through which research and other scholarly writings are created, evaluated for quality, disseminated to the scholarly community, and preserved for future use. The system includes both formal means of communication, such as publication in peer-reviewed journals, and informal channels, such as electronic listservs.

**Association of College & Research Libraries
Scholarly Communications Committee**



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Scholarly Communications in General

- What is Scholarly Communications?
- The current system cannot be maintained
- Agents of change
- What is the future of Scholarly Communications?



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Scholarly Communications in General

- Open Access Movement
- SPARC
- Alternative publishing – Society and University Presses



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Technologies Used



DigiTool



DSpace



fedora



Digital Commons



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How to Get Started

- Needs Assessment
- Content Assessment
- Identifying Early Adopters
- Outreach and Marketing
- Networking



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Needs Assessment

- Inventory your web presence.
- Interview anyone who will talk to you.
- Mine your co-workers' knowledge and connections.
- Tell everyone you meet about the repository-they'll tell you what their needs are.



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Content Assessment

- What does your community have?
- What can you acquire easily?
- What will have the most impact?



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Identifying Early Adopters

- Who has been asking for this?
- Who has a need?
- Who sees the potential?
- Who shows interest, any at all?
- Who will continue the relationship as a full partner?
- Who will be an advocate?



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Outreach and Marketing

- What's a  Wet-Jet?
 - Marketing wisdom says it takes 5 exposures to a new idea for consumers to understand the product
 - MIT's experience is that the IR concept requires at least 7 exposures
 - Catherine wisdom says it takes at least 7 exposures for consumers to understand an IR and decide they want to participate and then two or three more conversations for them to learn how to participate



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Outreach and Marketing

- Home page presence
- Faculty newsletter
- Student newspaper
- Mention in the AJC
- Mention in the *Chronicle*
- Listing the site
 - OAIster, DSpace wiki
 - Be active on lists



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Outreach and Marketing

- All publicity is good, except an obituary notice. Brendan Behan (1923–1964), Irish playwright. Quoted in Sunday Express (London, January 5, 1964).
- Of course I'm a publicity hound. Aren't all crusaders? How can you accomplish anything unless people know what you are trying to do? Vivien Kellems (1896–1975), U.S. industrialist, lecturer. Quoted in The Reader's Digest (Pleasantville, New York, October 1975).
- So...tell everyone!



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Outreach and Marketing

- Talk to anyone and everyone who will listen (library liaisons too) as often as they will have you back – invite yourself.
 - Associate deans – at least twice
 - Faculty Senate
 - Committees of the Faculty Senate
 - Colleges, departments, committees
 - People you pass in the hall



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Networking

- Keep talking.
- Offer the library's services in whatever capacity gets them to think about you.
- Show up at everything – invite yourself!
- Follow up with anyone you meet.
- Introduce them to each other.



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Emerging IR Environments

- SMARTech
- D-Scholarship
- Galileo Knowledge Repository



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SMARTech

<http://smartech.gatech.edu>



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D-Scholarship@FSU

- **Focused on Community Collections**
 - Undergraduate Research
 - Oceanographic Research Report Series
 - Undergraduate Honors in the Major Series
 - Electronic Theses and Dissertations
 - Fall 2005
 - All FSU dissertations online from 1951
 - All FSU masters theses online from 2003



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Undergraduate Honors in the Major Theses

Search the Articles:

A Novel Skin Imaging Technique and the Transdermal Delivery of Melanin

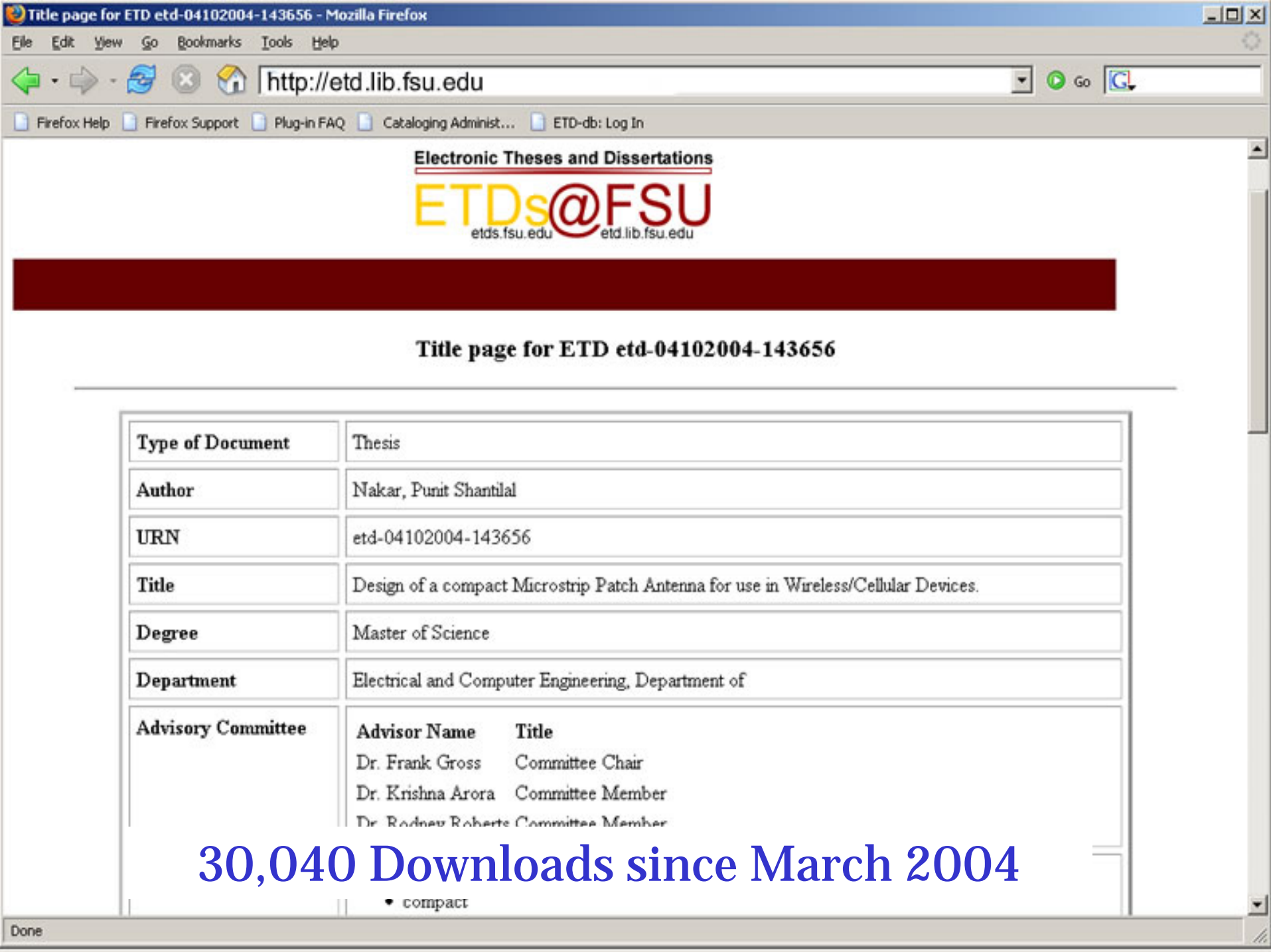
Kyra L. Carpenter, *Florida State University (Engineering - Chemical Engineering)*[Download the Paper \(PDF format\) - August 6, 2004](#)[Tell a colleague about it.](#)

Printing Tip: Select 'print as image' in the Acrobat print dialog if you have trouble printing.

ABSTRACT:

Skin cancer incidences have risen dramatically over the past couple of decades; the incidence of melanoma, the most common form of malignant skin cancer, has tripled in the last 30 years. According to studies done by Preston and Stern (1992), and Kricer et al, (1994), the natural skin pigment, melanin, is the best protective factor against skin cancer. While the photoprotective effects of melanin are well-known, few have pursued the incorporation of additional melanin into the skin as a means of skin cancer prevention. Transdermal delivery of melanin encapsulated in liposomes could result in additional pigmentation near the keratinocytes of the epidermis or the corneocytes of the stratum corneum. However, prior to the encapsulation of melanin, the pathways and kinetics of liposomes in transdermal delivery has to be determined. Liposomes are microscopic spherical bilayers of phospholipids with the ability to encapsulate a compound which freely floats in the interior. In this study, Omniscan™, a Gd-DTPA based MRI contrast agent, was encapsulated in liposomes and applied topically to excised human skin. The diffusion of the vesicles was then imaged with a 500 MHz microimaging NMR spectrometer. Using diffusion and T2 weighted imaging without Gd-DTPA the skin layers became apparent. When Gd-DTPA encapsulated liposomes were applied, a possible shunt pathway (hair follicle) appeared, however, there was no way to verify the structure. Hematoxylin and Eosin staining (HES) is a commonly used staining method in histology for study with light microscopy. In order to verify the structures seen in NMR images, HES was investigated. Additionally, studies with the transdermal delivery of fluorescence encapsulated liposomes were also completed for comparison with NMR results. This study established a basis for the study of transdermal delivery with NMR microscopy using Gd-DTPA encapsulated liposomes. It was concluded that the work with fluorescence and Hematoxylin and Eosin staining will allow for verification of the structures seen the NMR images.

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Title page for ETD etd-04102004-143656

Type of Document	Thesis	
Author	Nakar, Punit Shantilal	
URN	etd-04102004-143656	
Title	Design of a compact Microstrip Patch Antenna for use in Wireless/Cellular Devices.	
Degree	Master of Science	
Department	Electrical and Computer Engineering, Department of	
Advisory Committee	Advisor Name	Title
	Dr. Frank Gross	Committee Chair
	Dr. Krishna Arora	Committee Member
	Dr. Rodney Roberts	Committee Member

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Galileo Knowledge Repository

<http://www.library.gsu.edu/blogs/gkr/>



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IR Future Possibilities

- Adaptive uses of IRs
 - Macro-Uses
 - Institutional Wide Concepts for Digital Preservation and User Repurposing of Digital Information
 - Micro-Uses
 - Collection Based Concepts for finding, producing, curating the information of a group or community within an Institution.
- Other Trends



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Adaptive Uses of IRs

- **Macro-Uses**
 - Digital Object Productivity Archive
 - Institutional Records Management Storage
 - Faculty Tenure Portfolios
 - Learning Objects



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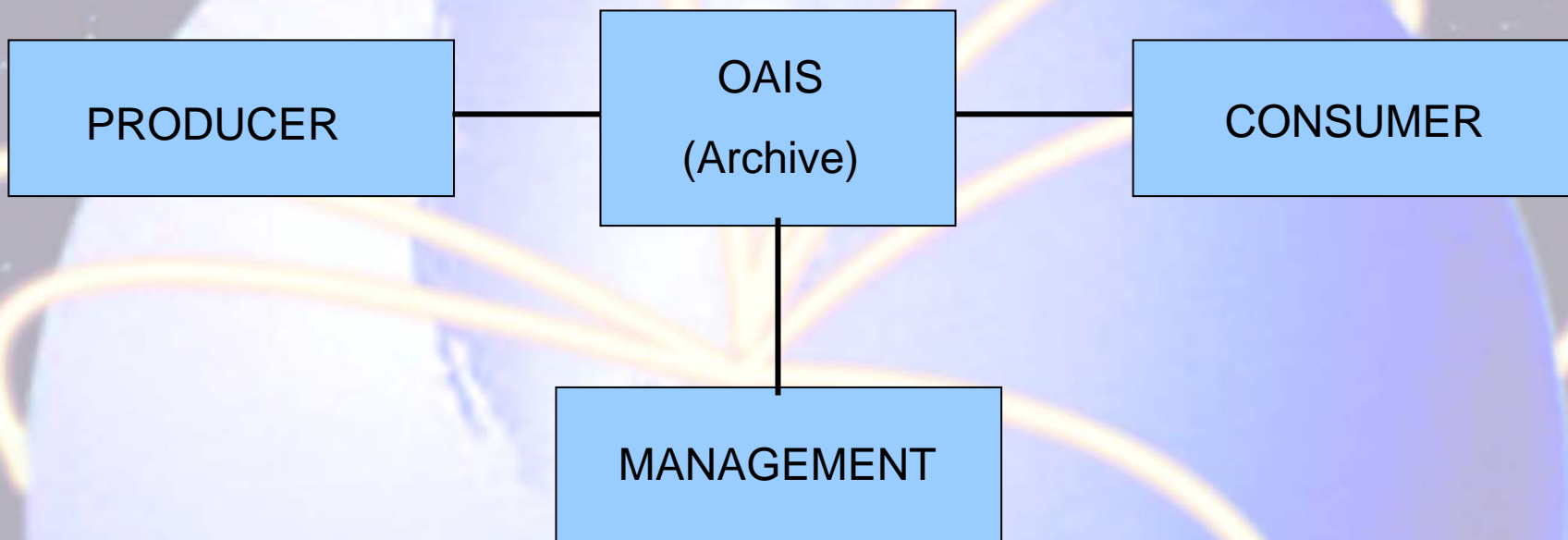


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OAIS Reference Model



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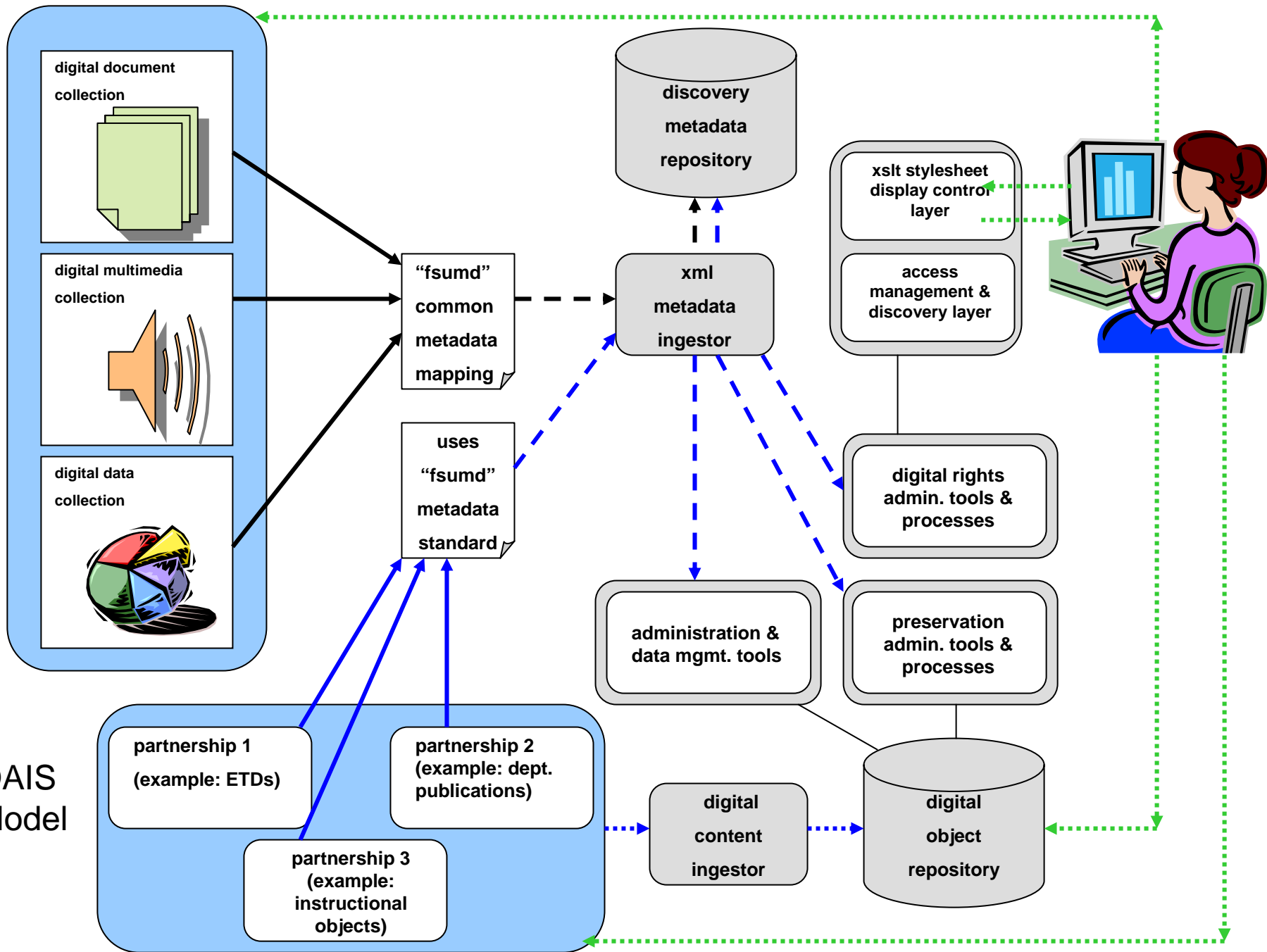


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OAIS Model



MACRO IR Concept

- System Model for All Institutional Storage/Preservation w/Multiple User Interfaces for Various Communities

– Examples

- University of Kansas – Inst. Wide Digital Preservation
- <https://kuscholarworks.ku.edu/dspace/handle/1808/166>
- NARA Electronic Records Archive
- http://www.archives.gov/electronic_records_archives



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Adaptive Uses of IRs

- **Micro-Uses**
 - Journal/Working Paper Publishing
 - Pre-print Archives
 - Conference Proceedings
 - Electronic Theses and Dissertations
 - Student E-Portfolios
 - Data Set Archives



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MICRO IR Concept

- Leveraging IR infrastructure to support many communities
 - Journal/Working Paper Publishing
 - CDL - <http://dermatology.cdlib.org>
 - Pre-print Archives
 - Arxiv - <http://arxiv.org>
 - Conference Proceedings
 - Emory Univ. - <http://www.metascholar.org/events/2005/freeculture>
 - Electronic Theses and Dissertations
 - FSU ETDs – <http://etd.lib.fsu.edu>
 - Student E-Portfolios
 - Duke Univ. - <https://portfolio.oit.duke.edu/index.jsp>



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Other Trends

- **IR Services**
 - Includes services for your community such as digitization and metadata enhancement of digital objects
- **Self-Archiving vs Library Archiving**
 - Incorporates strengths of libraries in collection development and collection building. Can be enhanced with Scholar Self-Selection.
- **Repository Certification**
 - With proper planning IRs can form the foundation of an Institution's plan for Information Management.
- **Data Curation/Management**
 - Synergistic Opportunity for Libraries and the Sciences – Emerging funding opportunities from IMLS and NSF.



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Other Trends

- **IR Services**
 - Cornell Univ. Format and Media Migration Service
 - <http://www.library.cornell.edu/iris/migration>
- **Self-Archiving vs Library Archiving**
 - SHERPA Project
 - <http://www.sherpa.ac.uk/romeo.php>
- **Repository Certification**
 - JHU/Mellon Foundation
 - <http://ldp.library.jhu.edu/projects/repository>
- **Data Curation/Management**
 - UK Digital Curation Centre
 - <http://www.dcc.ac.uk>



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- PPT Slides and Bibliography Online at:

<http://www.sedlc.org/presentations/samm2005>

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