

Building a Collection and Metadata Demystify

BioSciEd Network Orientation

February 2, 2006

Washington, DC

Amy L. Chang

Director, Education Department

American Society for Microbiology

www.MicrobeLibrary.org

achang@asmusa.org



AMERICAN SOCIETY FOR MICROBIOLOGY

Vision



“The proposed library will be an *electronic journal of peer-reviewed educational resources for the teaching community*. It will be analogous to an electronic journal of peer-reviewed scientific articles for the research community.”



AMERICAN SOCIETY FOR MICROBIOLOGY

From NSF proposal 1997

Subscribe You must purchase a subscription in order to login

Login You must login in order to browse the Full-text

build the Atlas-Protocol Collection Making images for the Atlas-Protocol Projects deadline 1/20/06

a community of microbiology Educators M's MICROEDU Listserv EduAlert List M's Education Home

Questions? mlbeLibrary@asmusa.org

Disclaimer

American Society for Microbiology, Washington DC

Sponsoring Partner of ben



Welcome Guest!

Welcome to MicrobeLibrary, a permanent collection of over 1400 original peer-reviewed resources for teaching undergraduate microbiology!

Need help narrowing your search results? Try using the Advanced Search feature.

Subscriptions required for full-text from:



Info Browse

Microbiology Education



Info Browse

Focus on Microbiology Education



Info Browse

Curriculum Collection



Info Browse

Microbe (formerly ASM News) Related Articles



Info Browse

Reviews

Free access to Visual Collection - this includes all Images, Animations and Videos

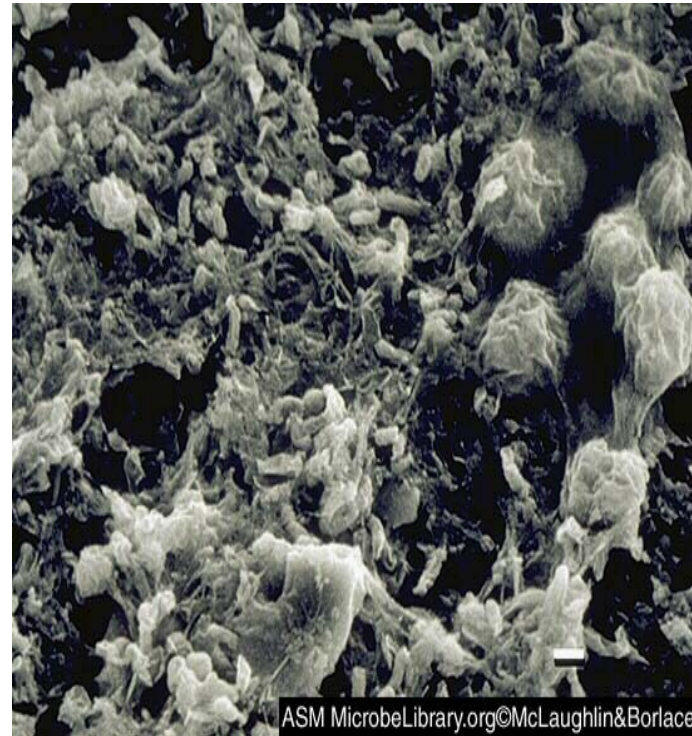


Introducing ML's Newest Resource: The Atlas-Protocol Collection

139 New Images linked to commonly used protocols including Blood Agar Plate, Gram

Underlying Principles

- Curriculum Guidelines
- Peer-Review
- Clearinghouse



AMERICAN SOCIETY FOR MICROBIOLOGY

Metadata Demystify

Identify Cataloguing Information



AMERICAN SOCIETY FOR MICROBIOLOGY

Resource is Not Worth Collecting IF It Can't Be



FOUND

SHARED



AMERICAN SOCIETY FOR MICROBIOLOGY

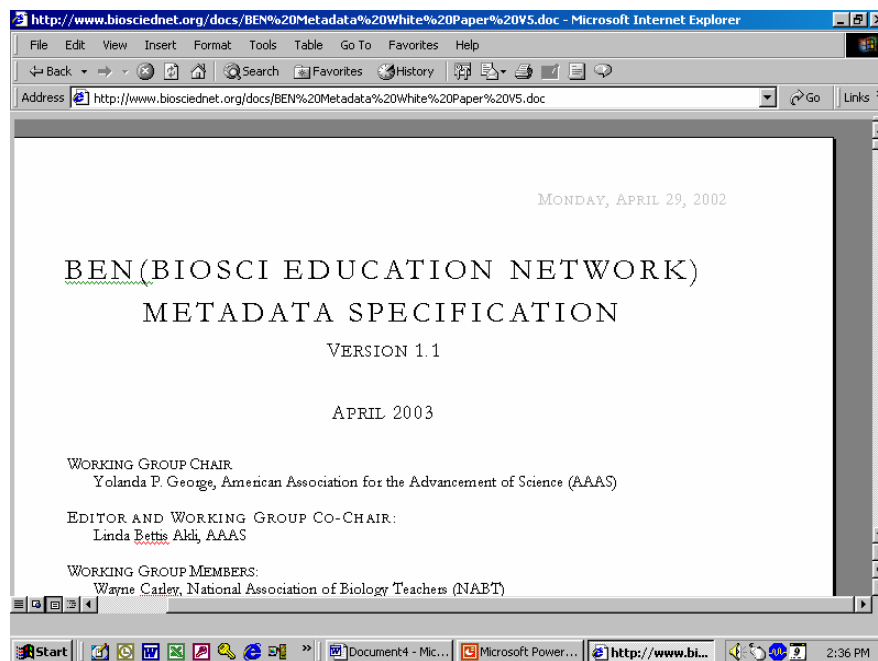
The NEED for Cataloguing Information

- **Authors** - Name and Describe
- **Librarians** - Organize
- **Users** - Browse and Find



AMERICAN SOCIETY FOR MICROBIOLOGY

BEN Cataloguing Requirements



7 Groupings

- General
- Life Cycle
- Technical
- Educational
- Rights
- Classification
- Metadata



AMERICAN SOCIETY FOR MICROBIOLOGY

BEN Cataloguing

- General - title, catalogue entry, language and description
- Life cycle – status, contributor, publication date
- Technical – file format and location
- Education – resource type, user type and educational level



BEN Cataloguing

- Rights – copyright and access fees
- Classification – life science disciplines, content or curriculum standards, and pedagogical use
- Meta-metadata – alliteration of metadata – author and publication date



AMERICAN SOCIETY FOR MICROBIOLOGY

Table 1. Learning Resource Type Vocabulary

Grouping	Resource Type Name	
Auditorium - Multimedia	<ul style="list-style-type: none"> ▪ animation ▪ audio ▪ video ▪ diagram ▪ graph/chart ▪ table ▪ 35 mm slide ▪ digital presentation (PowerPoint) 	<ul style="list-style-type: none"> ▪ illustration ▪ map ▪ photograph ▪ image ▪ simulation ▪ application ▪ discussion group/listserv ▪ webcast
Reading Room	<ul style="list-style-type: none"> ▪ meeting presentation ▪ proceedings ▪ book ▪ book chapter ▪ journal ▪ journal article/issue ▪ thesis/dissertation 	<ul style="list-style-type: none"> ▪ report ▪ abstract ▪ memo ▪ newsletter ▪ non-journal article ▪ pamphlet/brochure
Reference Room	<ul style="list-style-type: none"> ▪ bibliography ▪ index ▪ dataset ▪ dictionary/glossary ▪ thesaurus 	<ul style="list-style-type: none"> ▪ discussion group/listserv archive ▪ manual ▪ scientific standards and guidelines ▪ review
Classroom - pedagogical tools	<ul style="list-style-type: none"> ▪ educational standards ▪ teaching strategies & guidelines ▪ course syllabus ▪ lesson plan ▪ lecture/lecture outline ▪ laboratory exercise ▪ laboratory manual 	<ul style="list-style-type: none"> ▪ assignment/activity (non-laboratory) ▪ assessment: tool ▪ assessment: exam with answer key ▪ assessment: exam without answer key ▪ assessment: other ▪ fieldtrip guide



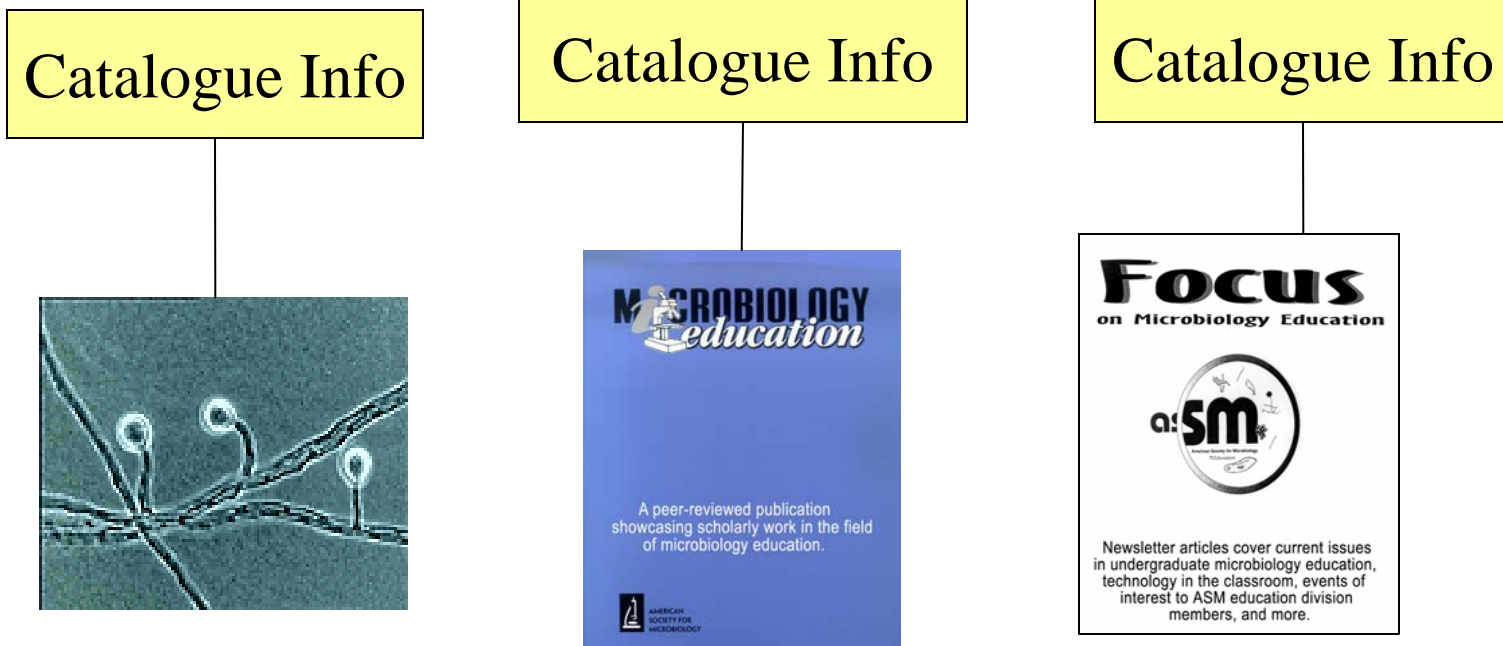
Table 1. Discipline Taxonomy

1. agriculture & aquaculture
2. anatomy
3. anthropology & archaeology
4. behavioral science
5. biochemistry
6. bioethics
7. bioinformatics, genomics & proteomics
8. biophysics
9. biostatistics
10. biotechnology
11. botany & plant science
12. cardiology
13. cell biology
14. conservation biology
15. cryobiology
16. developmental biology
17. ecology
18. education
19. endocrinology
20. entomology
21. environmental sciences
22. epidemiology
23. evolutionary biology
24. exercise & kinesiology
25. exobiology
26. forestry
27. gastroenterology
28. genetics & heredity
29. geography
30. histology
31. human biology
32. hydrology & water resources
33. immunology
34. invertebrate biology
35. marine biology
36. microbiology
37. molecular biology
38. mycology
39. natural history
40. nephrology
41. neurobiology
42. nutrition & food sciences
43. paleontology
44. parasitology
45. pathology
46. pharmacology
47. phylogeny
48. physiology
49. population biology
50. psychology
51. reproductive biology
52. respiratory biology
53. sociobiology
54. soil biology
55. systematics
56. taxonomy & classification
57. theoretical biology
58. toxicology
59. vertebrate biology
60. virology
61. zoology



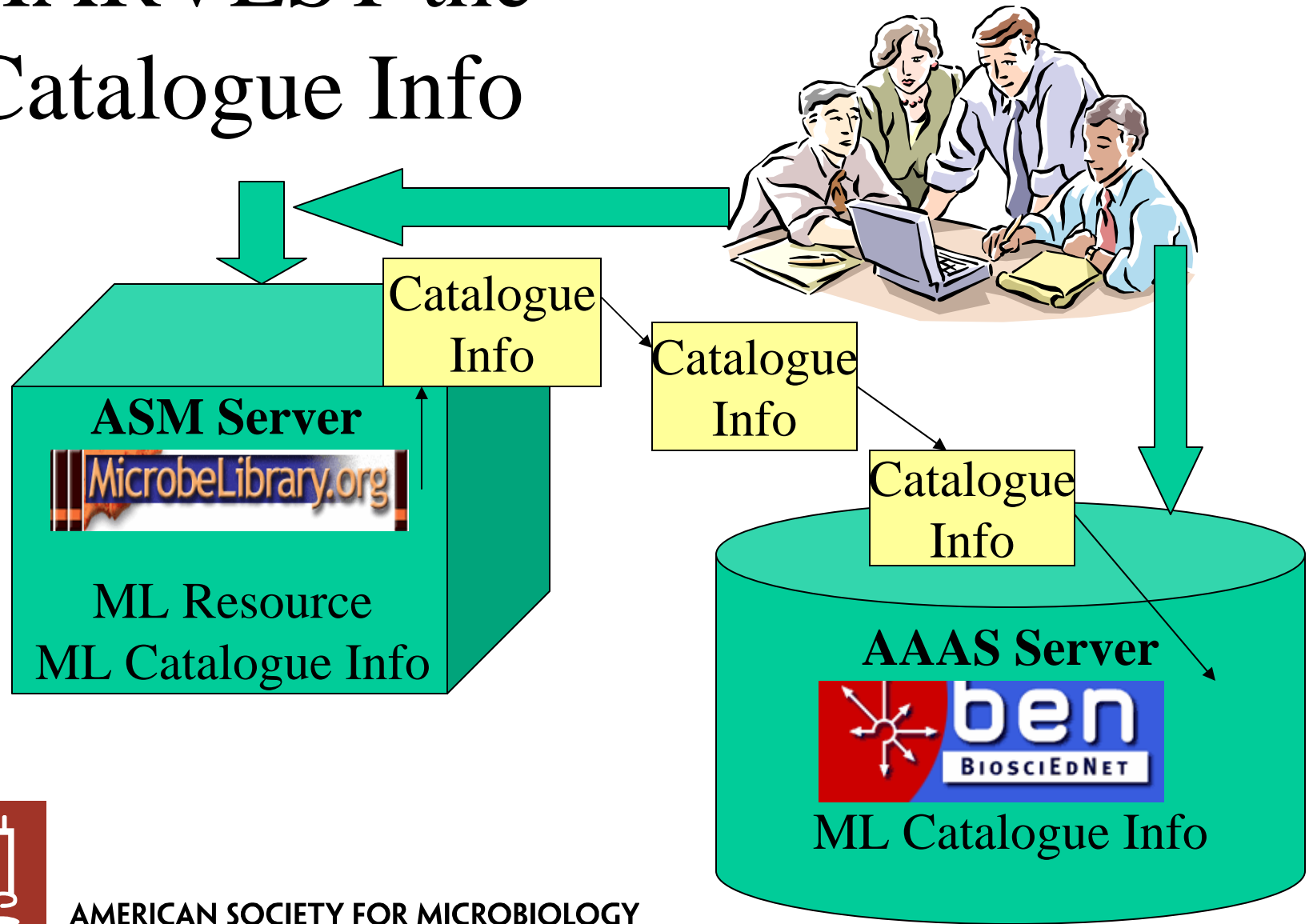
AMERICAN SOCIETY FOR MICROBIOLOGY

Relationship of Cataloguing Information and Resource



AMERICAN SOCIETY FOR MICROBIOLOGY

HARVEST the Catalogue Info



AMERICAN SOCIETY FOR MICROBIOLOGY

http://intranet.asmus.org/reaper/reaper.cgi?verb=GetRecord&metadataPrefix=oai_BEN&identifier=6 - Microsoft Internet E...

File Edit View Favorites Tools Help

Back Forward Stop Home Search Favorites History

Address http://intranet.asmus.org/reaper/reaper.cgi?verb=GetRecord&metadataPrefix=oai_BEN&identifier=602 Go Links >>

```
- <metadata>
- <BENRecord xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:noNamespaceSchemaLocation="http://www.bioscienet.org/docs/XML/ben.xsd">
- <General>
  <Title>Lactose Fermentation on MacConkey Agar Plates</Title>
- <CatalogEntry>
  <Catalog>ASM</Catalog>
</CatalogEntry>
  <Language>en</Language>
  <Description>MacConkey agar medium is commonly used to differentiate between
    various gram-negative rod-shaped organisms.</Description>
  <Keywords>Bacteria</Keywords>
  <Keywords>Diagnostic Techniques</Keywords>
  <Keywords>Cultures & Growth</Keywords>
</General>
- <LifeCycle>
  <Version>final</Version>
  <Status>final</Status>
- <LifeCycleContribute>
  <Role>author</Role>
  <Entity>BEGIN: VCARD FN:Neal R. Chamberlain ORG:Kirksville College of
    Osteopathic Medicine;Department of
    Microbiology/Immunology;Kirksville;Missouri VERSION:3.0 End :
    VCARD</Entity>
</LifeCycleContribute>
</LifeCycle>
- <MetaMetadata>
```

Done Internet

Start Micr... BEN... BEN... Mar... FW:... htt... 10:40 AM

Issues



Why Not?

- Don't know what to describe
- Don't know how to describe
- Cost too much

Consider...

- BEN Specifications
- Professional Society Uniqueness
- Authors and Reviewers



AMERICAN SOCIETY FOR MICROBIOLOGY

Curriculum Resource Submission Form - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Home Search Favorites History Print Mail News RSS Feeds

Address <http://www.microbelibrary.org/Submissions/OLSubmission.asp?SID=893> Go Links

MicrobeLibrary Online Submission Form

Curriculum Resource

Current Status: Submitted

Title of Submission:

Curriculum Type:

Description: Enter a single sentence describing the submission (limited to 250 characters).

Done Internet

Draw AutoShapes

Slide 19 of 24 Default Design

Start Micr... BEN... BEN... Mar... FW:... Cur... 10:49 AM

Submission Author

First Name:

Initial:

Last Name:

Division:

Institution:

City:

State:

Country:

Postal Code:

E-Mail:

Update

Reset

Delete

MicrobeLibrary Submissions Organisms

Organisms

Select the organism(s) found in your submission and click the Submit button below. If your organism is not listed, please provide organism name in the Notes section of the main submission page.

[Resume Editing Submission](#) (Changes will not be saved unless you click Submit.)

Selected		Organisms
Yes	No	
<input type="radio"/>	<input checked="" type="radio"/>	<i>Candidatus</i> B. anammoxidans
<input type="radio"/>	<input checked="" type="radio"/>	Acanthamoeba
<input type="radio"/>	<input checked="" type="radio"/>	Acinetobacter
<input type="radio"/>	<input checked="" type="radio"/>	Acinetobacter baumannii
<input type="radio"/>	<input checked="" type="radio"/>	Actinomycetes
<input type="radio"/>	<input checked="" type="radio"/>	Adeno-associated virus
<input type="radio"/>	<input checked="" type="radio"/>	Adenovirus

Two Types of Cataloguing Data

Contextual

Requires judgment
(unique)

- Unique information
 - Title, author, description, audience
- Default information
 - Language, rights, fees, publication date

Inherent

Extracted from digital
resource itself

- File type
- File size



Acknowledgements

- Gloria Delisle – Distance Education (95-01)
- Kristine Snow – Distance Education (01-03)
- Erica Suchman – Technology Enhanced Education (formerly Distance Education) (03-06)
- Frederic Pfaender – Education Board (91-97)
- Clifford Houston – Education Board (97-06)
- Kelly Gull and Jean Gondwe (current staff)

www.MicrobeLibrary.org



AMERICAN SOCIETY FOR MICROBIOLOGY