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Managerial issues in establishing and running an open repository -case DViikki

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Viikki Science Library

University of Helsinki

Finland

OUTLINE

- Open Access
- The Finnish open access policy framework
- The institutional repository DViikki
- Future development of DViikki

Open Access

- Free immediate access
- Deposition in a digital public repository

Open Access Statements

- Budapest Open access initiative 2002 (http://www.soros.org/openaccess/read.shtml)
- Berlin Declaration on open access to knowledge in the sciences and the humanities 2003 (http://oa.mpg.de/openaccess- berlin/ berlindeclaration.html)
- Bethesda Statement on open access publishing 2003
- Petition for guaranteed public access to publicly-funded (EC) research results (http://www.ec-petition.eu/) over 26000 signatories from all over the world 2007
- An Open Letter to the U.S. Congress,July 8, 2007 signed by 26 Nobel Prize Winners
- (Appropriations bill in congress mandates free access..)

Two routes to Open Access

- Open Access Journals (the golden line, formal)

  - Author-fees or institutional subscriptions to author pays journals, ”the new deal”

    - PLoS, BioMedCentral,
    - Springer Open Choise, PNAS

    - DOAJ the directory of Open Access Journals lists 2752 free, full text, quality controlled scientific and scholarly journals 31.7.2007 (http://www.doaj.org)

Two routes to Open Access

- Digital/E-print repositories/archives

(the green line, depositon of manuscripts, informal)

  - Subject/Disciplinary
    - PMC (PubMed Central), UK PMC, arXiv

  - Institutional
    - DViikki of one campus at the University of Helsinki with 4 campuses

    one of over 900 repositories (listed in OpenDOAR =directory of Open Acess Repositories and ROAR)

Definition of Institutional Repositories (IRs)

- ”A university-based institutional repository is a set of services that a university offers to the members of its community for the management and dissemination of digital materials created by the university and its community members” (Lynch 2003)

Sharing experiences of institutional repositories (IRs)

- Crucial to share both success and failure stories of IRs (1
- An enourmous interest in sharing best practices, experiences and successful implementations of IRs (2
- Developing a digital institutional repository: The DSpace @Cambridge project. Peter Morgan, EAHIL 2004
- Establishing an Institutional Repository: a Step by Step Approach. Arne Jakobsson, EAHIL 2006

1) O.Y.Rieger. Select for Success. Key principles in assessing repository models. D-Lib Magazine v13, nr 7/8, 2007

2) Karen Markey et al. Census of IRs in the US MIRACLE project research findings. CLIR Pub 140, Feb. 2007

National and University of Helsinki-OA policy

- The Ministry of Education promotes and supports open-access publishing and carries out and monitors the implementation of these recommendations in cooperation with other ministries

- The Finnish Council of University Rectors signs the Berlin declaration 2006 (including the University of Helsinki)

- UH Research policy strategy 2007-2009
  Contains the same recommendations as given by the Ministry of Education.

The Viikki Campus of University of Helsinki

2500 staff, 6000 students

- Faculty of pharmacy
- Faculty of veterinary medicine
- Faculty of biosciences
- Faculty of agriculture and forestry

- Research institutes in biotechnology, neuroscience
- Viikki campus Educational Development Service
- Viiki Science Library

DViikki – the repository of the Viikki campus-goals

- To provide increased visibility of and access to publications produced at the Viikki campus
- To offer an easy- to-use platform for self-archiving of electronic publications for researchers, teachers and students
- To facilitate interoperability using established standards enabling harvesting on different levels;e.g. the Finnish national library portal (MetaLib)
- To facilitate digital archiving and long-term preservtion in the future through the National Library of Finland

DViikki – the repository of the Viikki campus

- Installed 2004 by Viikki Science Library. Pilot phase continued till December 2006.

- Technical features
  -DSpace open source software 1.2 > 1.4.2
  -Unix-based, written in Java
  -OAI- compatible
  -metadata (Qualified Dublin Core)
  -persistent identifiers (”handles”)
  - retrieval via standard search engines (OAIster, Google)

Project funds for the development

Content

- Peer reviewed full text research papers 600
- Theses (abstracts or fulltext) 500
- Reports 75
- Digitized material 90
- Text books (veterinary medicine in Finnish) 10
- Metadata to research papers transported from international databases with their permission, links to fulltext 2300
- Other content

Use statistics: Google analytics, DSpace statistics, ROAR (http://roar.eprints.org)

Policies

- Guidelines and policies have been created by the library in cooperation with the users and other collaborators (National resource library in medicine TDS repository). They are continuously revised as more information is gathered about the research process, work on theses
  - types of material
  - selection criteria
  - usage restrictions
  - organisation of collections
  - metadata standards

Depositing is not mandatory. It is considered for theses

Acquisition of content – methods

- Voluntary content provision and self-archiving is sparse

- Awareness, marketing of services
  - presentations (newsletters, brochures, meetings)
- Advocacy
  - workshops,private meetings with faculty and departments
  - recruitment of faculty one-on-one as early adopters
- Education
  - Courses in information literacy for students
- Collaboration
  - Sorting out copy right issues (Sherpa/RoMEO)
  - Library deposits material
  - Collection of feed- back via interviews for further development

Challenge and new role for librarians , resources required

Why is DViikki useful ?- Researcher / head of department

- *My research output stays well organized and is preserved better than in paper form in my book case .*
- *My papers can be read and printed everywhere, where there is an internet connection. I can use the repository from home and when traveling, it is always in order.*
- *Every article can be sent anywhere by e-mail, without having to send it as a memory consuming attachment*
- *I can use pictures and texts from my own material by copy/paste for my own lectures and power points*
- *My students can also easily read my scholarly production from their home computer*
- *I can easily introduce myself through my research production if somebody asks for my Curriculum Vitae*

Why is DViikki useful ? - Researcher / head of department (2)

- *The publishers that we have been in contact with, incl AAAS, have seen the archiving as positive also from their point of view, as marketing rather than competition*
- *The regular assessment of research output by the university would be easier if the material is deposited in a repository and could be transmitted to the panelists*
- *The repository is a more efficient form of registering scholarly output than the existing ones (database of references to publications) and could be used e.g for productivity assessment internally as well as externally*
- *The repository supports the prerequisites for research and teaching. Quick, reliable and efficient communication of information is necessary in research and teaching*

Why is DViikki useful ?- Researcher / head of department (3)

- *The use of the repository shows an effort to achieve openness, publicity and transparency; the classical virtues of science*
- *The scanning and the solving of intellectual property issues has not been cumbersome or expensive for the department. It has been done by students educated and supported by experienced library staff*

Reduction of administrative work for the researcher and the department is emphasized.Visibility, prestige not as much.

Negative feedback to depositing in DViikki

- Why learn to use yet another system?
- Confusion and uncertainty regarding copyright?
- Quality issues-differences between the deposited manuscript and the final print etc
- Reluctance to share results until formally published
- Is posting a manuscript =publishing ?
- Fear of plagiarism
- The total research output is not deposited- no CV
- Critics of interface, search capabilities, structure
- No incentive to deposit, voluntary (OK if the library does it)
- Permanence and transportability?

Correlates well with : Davies, P.M. et al, IRs:Evaluating the reasons for non-use of Cornell University´s installation of DSpace, D-Lib, 13 (3/4),2007

Benefits of user feedback

- Experiences from the pilot-phase of DViikki showed the necessity to involve and listen to the faculty and administration
- Better knowledge of work procedures, decisionmaking etc has been used to improve management of contents and to further develop the system to support users and the university
- Users want a useful tool requiring minimal efforts for registration of their research output as well as for arhiving of full text (one stop shop)

Future development of DViikki

- A new collaborative project started in 2007 between the Viikki campus and the campuses of health and physical sciences, all with the DSpace- based IRs of their own called: DViikki, Terkko Document Space (TDS) and Katja Goals:
- Enhance efforts to develop the DSpace based service infrastructure of the UH in sciences.

- Transport metadata (in XML, RSS or Dublin Core form) from other databases to DSpace. Reuse existing metadata in the IRs (PubMed, CAB, arXiv with their permission)

Future development of DViikki (2)

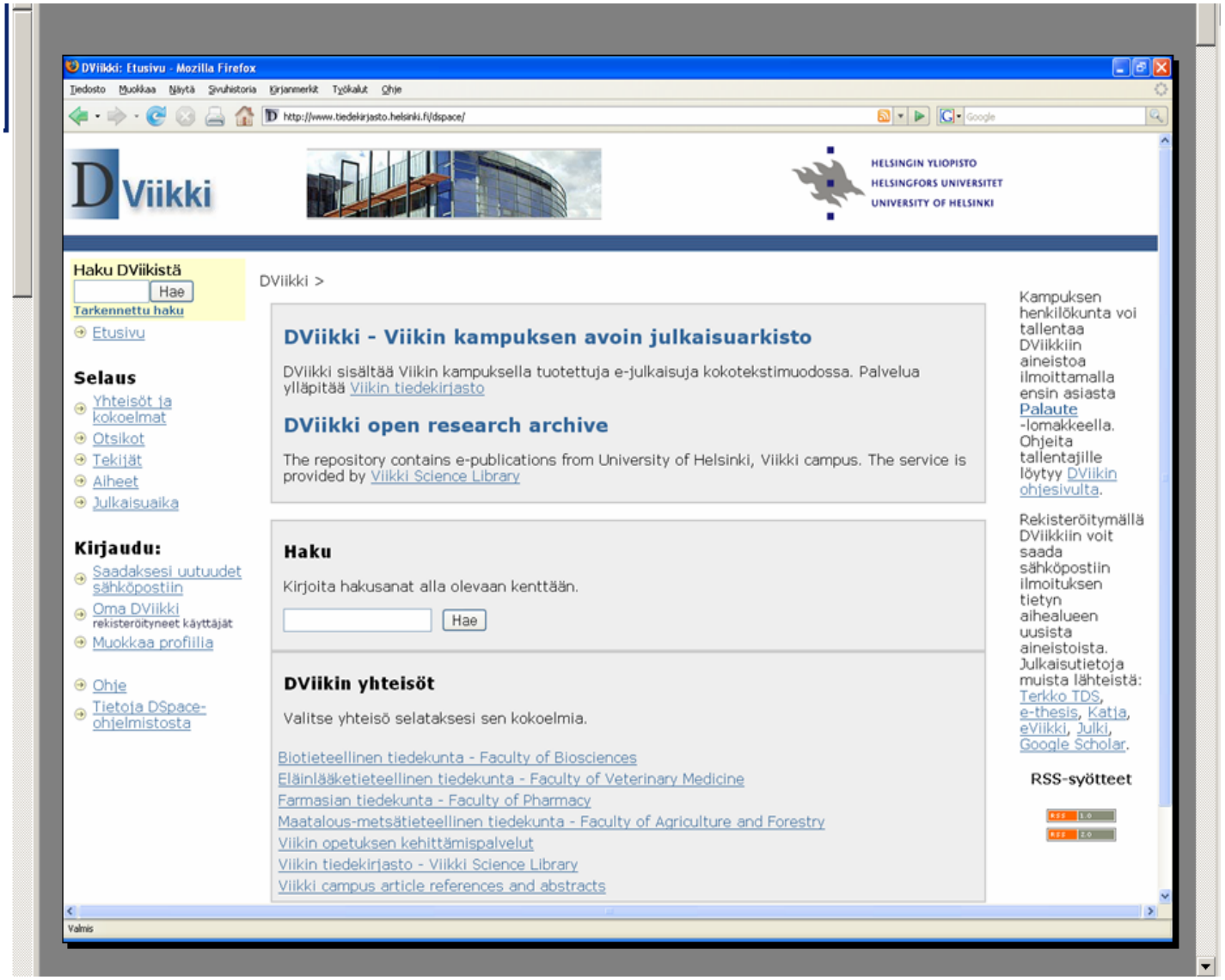
- Integrate the UH research publications reference database from 1995 (Voyager) and the IRs by metadata conversion and transport from DSpace to Voyager (one-stop-shop)
- Cooperation with the stakeholders in the steering group for customisation to procedures and work culture
- Cooperation with the IR for the HU city campus (humanities, social sciences, law, pedagogics and theology)
- Cooperation with the National library –long-term preservation

Challenges

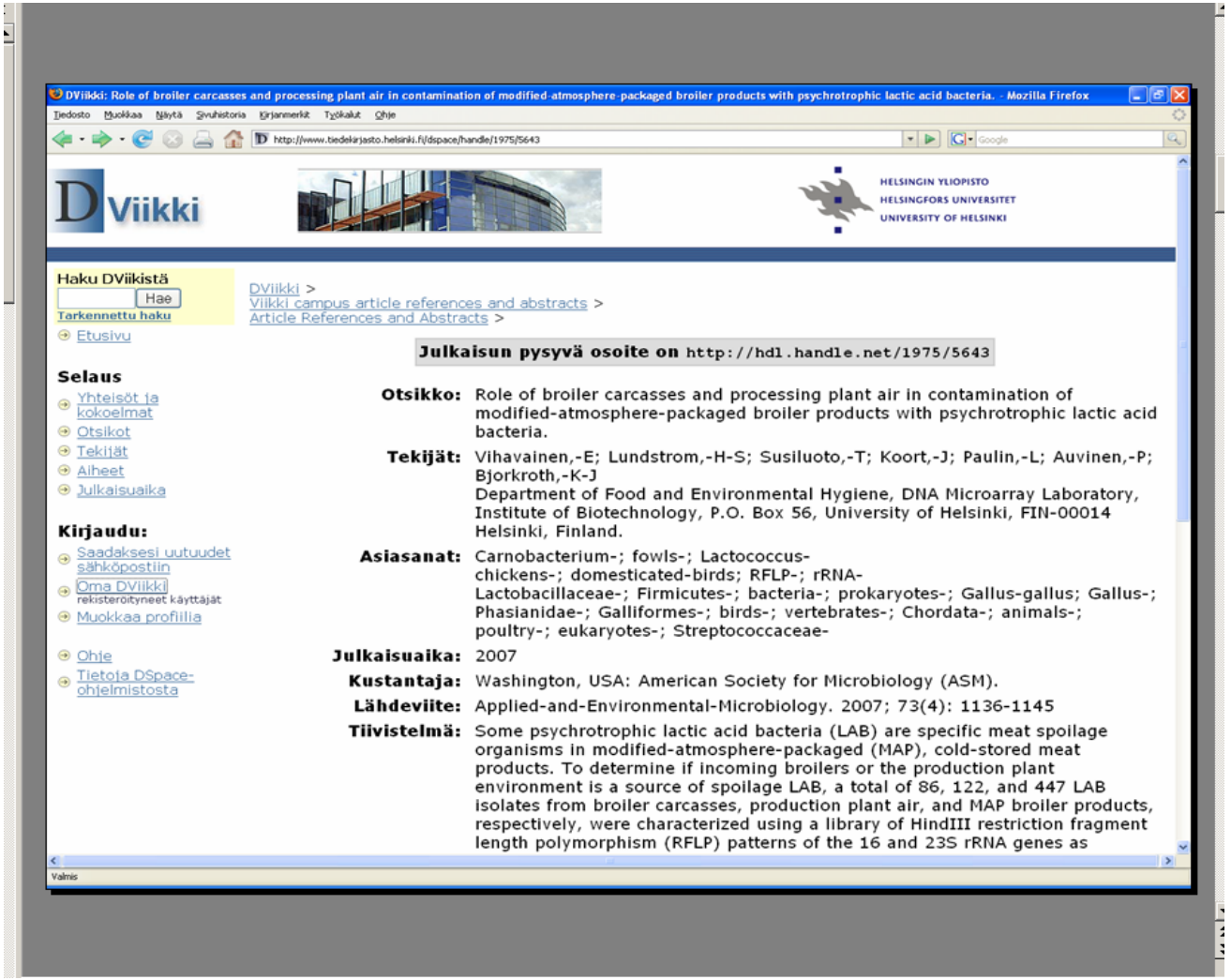
- The library manages the running and development (projects) of DViikki (routine operating costs, project funds)
- The library manages policy issues
- The library manages the advocacy for and marketing of content provision
- The library has handled the copyright issues and done some of the registration for the early adopters

- The close collaboration with faculty, departments, faculty administartion etc is a challenge for the library and involve the librarians more closely in the process of scientific communication

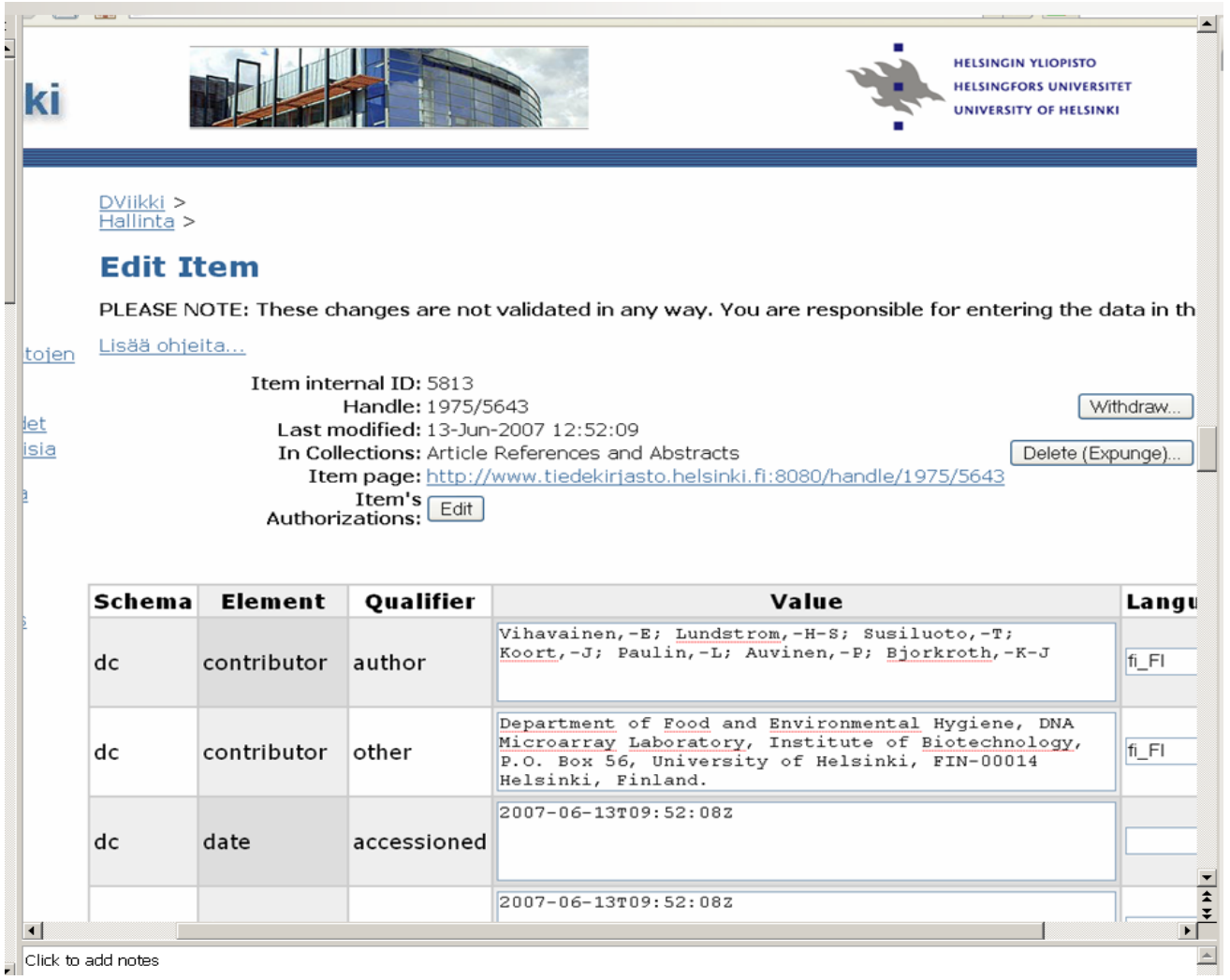
DViikki-collections



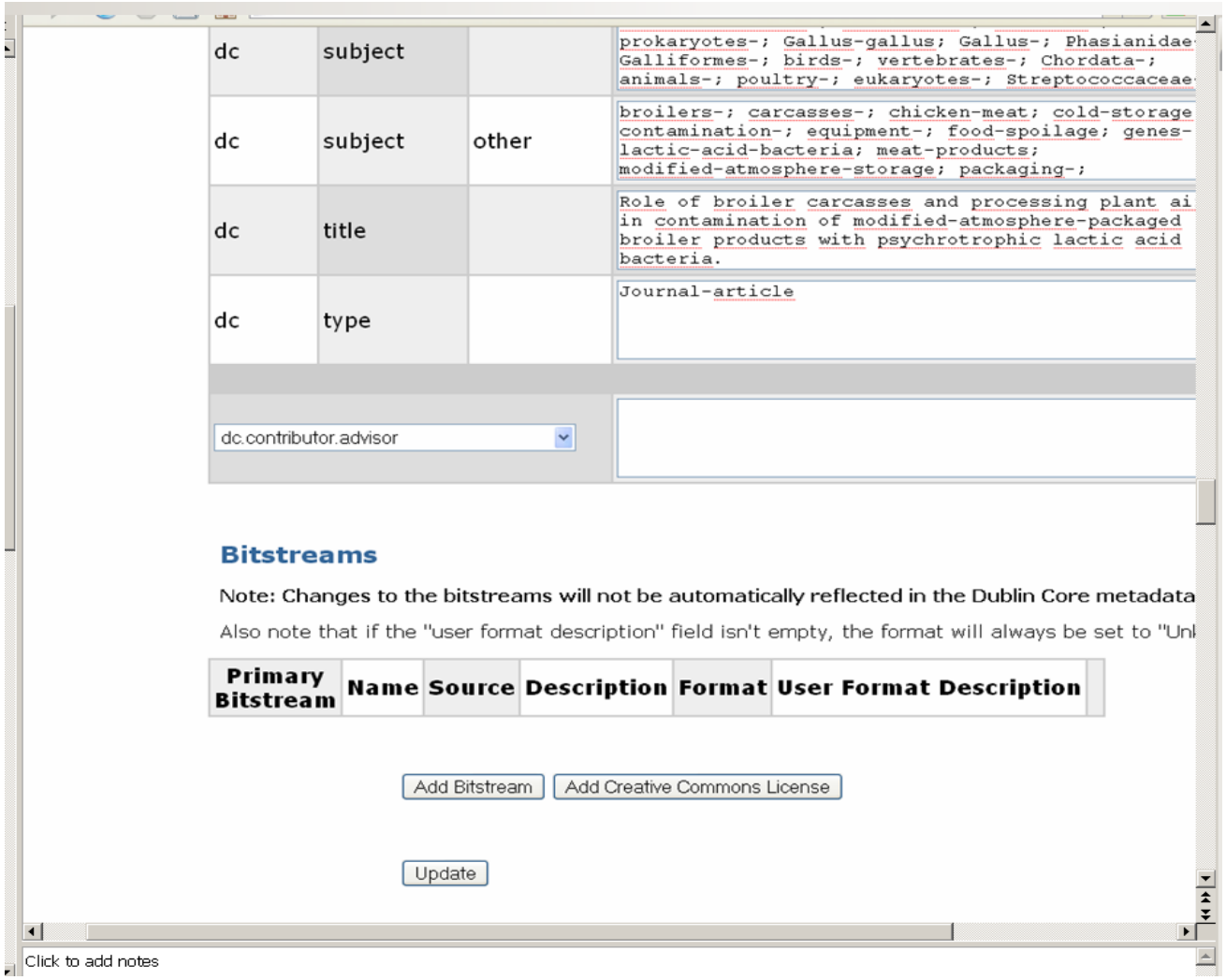
DViikki- transported metadata



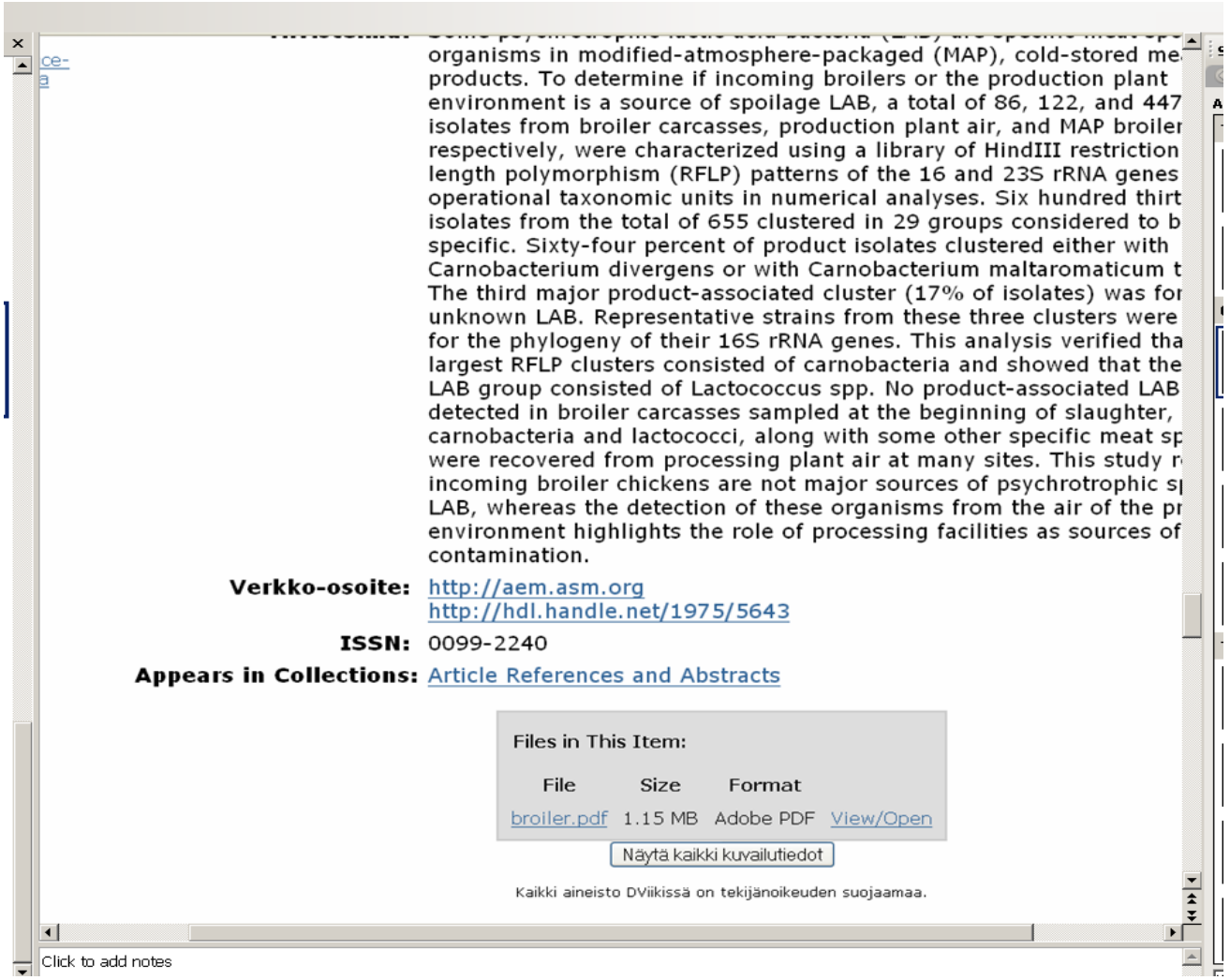
DViikki- linkage of fulltext to metadata



DViikki- linkage of fulltext to metadata



DViikki-linkage of fulltext to metadata



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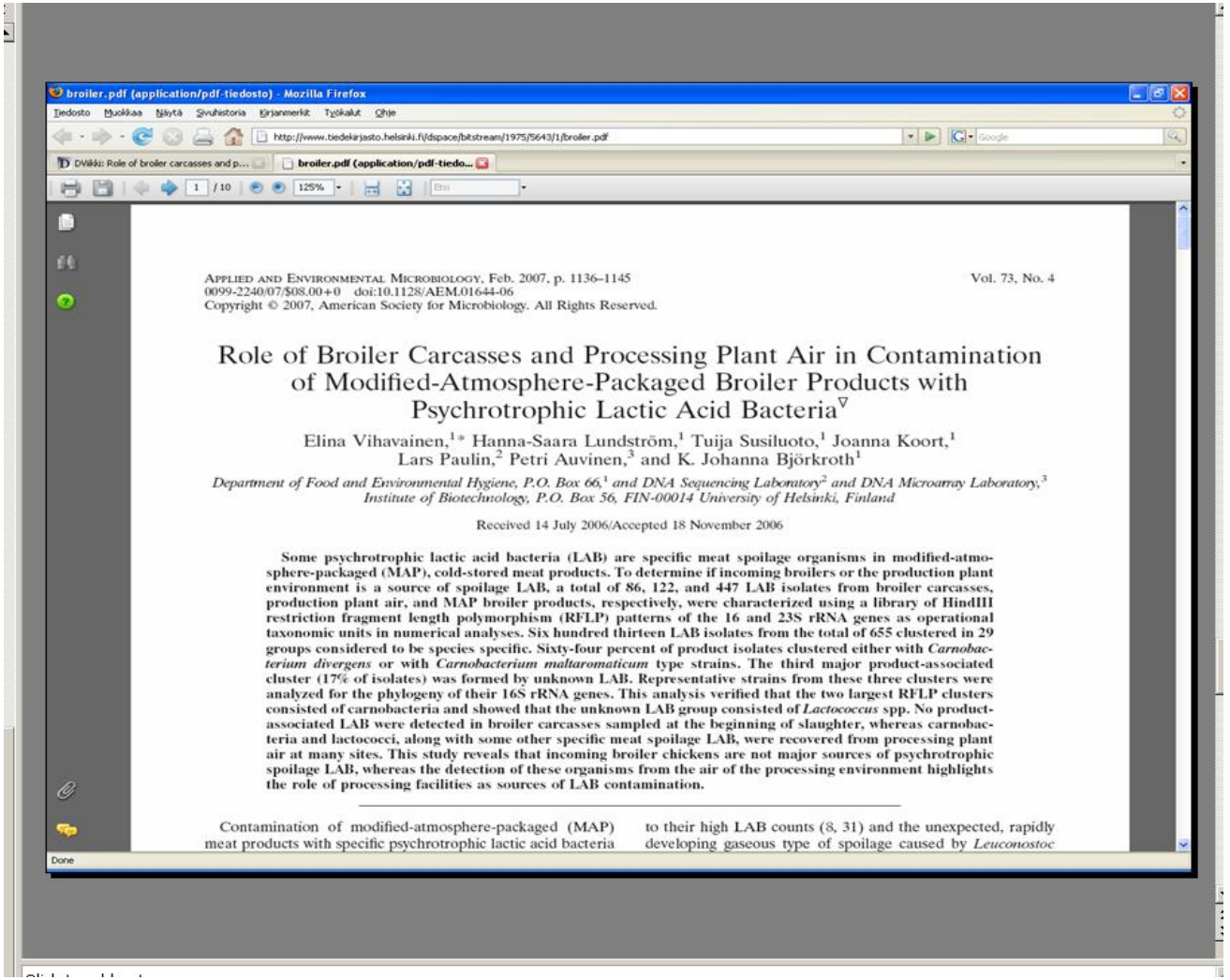

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Role of Broiler Carcasses and Processing Plant Air in Contamination of Modified-Atmosphere-Packaged Broiler Products with Psychrotrophic Lactic Acid Bacteria▽

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Some psychrotrophic lactic acid bacteria (LAB) are specific meat spoilage organisms in modified-atmosphere-packaged (MAP), cold-stored meat products. To determine if incoming broilers or the production plant environment is a source of spoilage LAB, a total of 86, 122, and 447 LAB isolates from broiler carcasses, production plant air, and MAP broiler products, respectively, were characterized using a library of HindIII restriction fragment length polymorphism (RFLP) patterns of the 16 and 23S rRNA genes as operational taxonomic units in numerical analyses. Six hundred thirteen LAB isolates from the total of 655 clustered in 29 groups considered to be species specific. Sixty-four percent of product isolates clustered either with *Carnobacterium divergens* or with *Carnobacterium maltaromaticum* type strains. The third major product-associated cluster (17% of isolates) was formed by unknown LAB. Representative strains from these three clusters were analyzed for the phylogeny of their 16S rRNA genes. This analysis verified that the two largest RFLP clusters consisted of carnobacteria and showed that the unknown LAB group consisted of *Lactococcus* spp. No product-associated LAB were detected in broiler carcasses sampled at the beginning of slaughter, whereas carnobacteria and lactococci, along with some other specific meat spoilage LAB, were recovered from processing plant air at many sites. This study reveals that incoming broiler chickens are not major sources of psychrotrophic spoilage LAB, whereas the detection of these organisms from the air of the processing environment highlights the role of processing facilities as sources of LAB contamination.

Contamination of modified-atmosphere-packaged (MAP) meat products with specific psychrotrophic lactic acid bacteria to their high LAB counts (8, 31) and the unexpected, rapidly developing gaseous type of spoilage caused by *Leuconostoc*

Benefits of DViikki for the user - the ideal situation

- For the Individual
  - Provide a central, organized archive of their scholarly work
  - Improved and facilitated discovery and retrieval of content
  - Increase the dissemination and impact of their research
  - Acts as a full CV
- For the Campus/Institution/Department
  - Increase visibility and prestige
  - Acts as an advertisement to funding sources, potential new faculty and students, etc.
  - Support learning, teaching, and research
  - Helps in administration, e.g., research assessment
- For Society
  - Provide access to the Finnish and the world´s research
  - Ensures long-term preservation of institutes' academic output