Virtual Research Environment: 2 Years Later

or
Takes Shape

Mark Leggott
Robertson Library, UPEI
Death & Rebirth of repository

VRE approach:
- build capacity
- library at forefront
- all landscapes

STEWARDSHIP
Data Stewardship

Researchers & data creators want help managing the data deluge. Who will respond?

Common refrain from recent Islandora session:

*This is the first time someone has responded to the data challenges I am facing.*

There is no more significant opportunity for academic libraries in the next few decades.
Vision the same
Evolution of tools and community
Library foundation of all 3 landscapes
Research core driver
Staff enabled
It’s All About the Local
It’s All About the Local

Google Can’t Do Local Like You
Islandora Project

- Focus on open source & open data
- Staff capacity - team of 7 devoted > 50% to Islandora and related - soon 12+
- In use in all 3 landscapes at UPEI
  - Research = in 2009, $150K HW & $200K staff
  - Admin = Senate, document management pilot
  - Learning = Digital Collections, LOR
Islandora External

- 1st External contract by end of Sep
- Current Users/Implementors include:
  - University of North Texas, Georgia Institute of Technology, University of NB, Carleton University, University of Guelph
  - Interest from Sloan-Kettering et al.
- Significant activity on Islandora support forum
- Stronger DuraSpace partnership in works
Islandora Framework

- Drupal-Islandora-Fedora at the top of the stack
- Separates data from UI
- LAMP framework with a range of helper applications/workflows
- Provision of modular “Solution Packs” for specific requirements
Fedora

- Repository layer
  - data, metadata, workflow, AuthZ/T
- Work with any data asset, schema
- Increasingly popular repository app
- Semantic support
Drupal

- Collaborative layer
- Easy branding
- Multisite in one
- New functionality & modules all the time
- Community large and Web 2/3 savvy

Drupal: power by the people

Open Source and backed by thousands of developers, Drupal empowers organizations to quickly and easily create robust Social Publishing web sites. Engage customers, build community, grow your brand, be social. Get Involved»
Islandora

- Glue that binds Drupal & Fedora
- Drupal module, PHP & Java apps
- Rule engine for flexible workflows
- Drop-In support for new modules
Architecture

Drupal

Islandora

Fedora
Architecture

- Drupal
  - LDAP
  - Groups
  - Forms
  - FCK
  - Hooks
  - ModuleX

- Islandora
  - XACML Filter
  - Drupal Module
  - Rule Engine
  - PHP Code

- Fedora
  - Data
  - Collection Policies
  - Security Policies
  - XSLTs
Workflows

- Ability to define & integrate complex digital workflows
  - IslandLives book transformation
  - IslandScholar document conversion
- Fedora disseminators, Islandora rule engine
- Future integration of Taverna +
Software Stack

1. Hardware Layer
   - Open Archive options: High Ingest, High Access, High Ingest/Access

2. Storage/Preservation Layer
   - MySQL (default), PostGres, Oracle
     - OpenSolaris/Linux/OSX/WIndows, SAM, Akubra, etc.

3. LAMP Application Layer
   - ghostscript, imagemagick, Java, JMS/QServer (PHP XML/SOAP, Curl), Other LAMP applications

4. Repository Application Layer
   - Islandora, Fedora, Drupal, Solr/Lucene

5. Service Application Layer
   - ABBYY, Gate/Annie, Djatoka, OpenOffice

6. Solution Pack Layer
   - A. VRE Solutions
     - Sample Coll & Apps
   - B. Dig Archive Solution
     - Sample Collection
   - C. Ent Repository Solution
     - Sample Collection
Solution Packs

Assemblages of collection policies, disseminators, workflows, apps, data

Delivered with new Islandora releases

1. Institutional Repository
2. Book/journal/newspaper archive
3. Biosciences (+ specialized, such as genomics)

Additional from UPEI & community
Sun Partnership

- Working with Sun team on optimized software stack
- Pre-defined HW solutions
- VAR partnerships
- New features, such as SAM support
Community Partnerships

- Support for broader community
- Islandora Partners
- Contributors to base as well as Solution Packs
- Islandora.ca site will be foundation
Support Model

- Support and development contracts
  - Annual support/hosting
  - Website development, custom solution packs
- Developing core Islandora Service Team, distributed developer/support resources for 24x7, multi-timezone support
Islandora Sites

Preserving PEI's community histories
IslandLives is a work in progress. Please be aware that content will change, browse and search options will change, and IslandLives may be unavailable at times.

Made possible through a generous private donation, IslandLives contains community and church histories and it builds on the Robertson Library’s mission to preserve and share unique material relating to Prince Edward Island and demonstrates UPEI’s ongoing commitment to making PEI’s cultural and published heritage available to all. Welcome.

Explore By
- Works that have been digitized

IslandLives Desk
- IslandLives Featured at APLA Conference
  more

Place Name

Alan Misener RCA
Eleanor Misener coll.

Leslie MacLauchlan RCAF
I. MacLauchlan coll.
Administrative/IR
Antioxidants and free radical scavengers for the treatment of stroke, traumatic brain injury and aging


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Abstract
The overproduction of reactive oxygen species (ROS) and reactive nitrogen species (RNS) is a common underlying mechanism of many neuropathologies, as they have been shown to damage various cellular components, including proteins, lipids and DNA. Free radicals, especially superoxide (O2^-), and non-radicals, such as hydrogen peroxide (H2O2), can be generated in quantities large enough to overwhelm endogenous protective enzyme systems, such as superoxide dismutase (SOD) and reduced glutathione (GSH). Here we review the mechanisms of ROS and RNS production, and their roles in ischemia, traumatic brain injury and aging. In particular, we discuss several acute and chronic pharmacological therapies that have been extensively studied in order to reduce ROS/RNS loads in cells and the subsequent oxidative stress, so-called “free-radical scavengers.” Although the overall aim has been to counteract the detrimental effects of ROS/RNS in these pathologies, success has been limited, especially in human clinical studies. This review highlights some of the recent successes and failures in animal and human studies by attempting to link a compound’s chemical structure with its efficacy as a free radical scavenger. In particular, we demonstrate how antioxidants derived from natural products, as well as long-term dietary alterations, may prove to be effective scavengers of ROS and RNS.
### Technical Details

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### Romeo

- **Journal:** Current Medicinal Chemistry
- **Published By:** Bentham Science Publishers Ltd
- **Publisher Url:** http://www.bentham.org/
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UPEI Senate Meeting 2009-09-18

Documents for the September 18, 2009 Senate meeting. The University Act and Processes and Procedures are for the new members.

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A partnership project helping Island students bring the past to life using the tools of the future.

a Living Archives

Notre projet aide les élèves insulaires à faire revivre le passé en utilisant les outils de l’avenir.

les archives vivantes

Enter below / Entrez ci-dessous:

A Living Archives is a partnership project helping Island students bring the past to life using the tools of the future.

Notre projet d’archives animées aide les élèves insulaires à faire revivre le passé en utilisant les outils de l’avenir.
Welcome to the Basic Academic Skills video series. This series of videos is aimed at secondary and post-secondary students who want to learn more about researching and writing. If you didn't quite catch what your instructor said in class the other day or if you don't remember how to make a thesis statement because your attention span in high school was a bit scattered, rest assured you are not alone. The explanations and examples in these easy to understand videos will help you get on the path to writing success in no time.

Use the scroll bar on the right to view all of the video selections.

You are able to COMMENT or make suggestions on these videos.
Learning

Red & White
Welcome to the digital home of The Red & White, the campus magazine of St. Dunstan’s University (SDU) from 1909 - 1969. Digitization of this resource is made possible by the SDU Class of 1954, and the generous support of the SDU Board of Governors, as well as many individual SDU alumni. This digital archive contains ~10,000 pages worth of content, making it one of the largest resources of its kind ever produced in Eastern Canada.

Issues are displayed in chronological order; to see the contents of any issue, just click its cover image (note that a few early issues are missing front covers, in which case the first available page was used). You will then be presented with a tabular display of all the articles/sections in that issue (for most issues, this will typically translate to 15 - 20 pdf files); simply click the page image for the article/section you would like to see.

November 2008 Status Update:
- Digitization of The Red & White is now complete. All issues for 1909 - 1969 are available below.
- The storage, search, and display of these images use innovative, open-source technologies, and the Web pages you are using now are still very much works in progress; your comments as we work to improve the appearance and functionality of these pages are greatly appreciated.

Browse Red & White now
Learning
Preserving PEI's community histories

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Explore By
- Works that have been digitized
- Title
- Place Name
- Surname
- Subject
- Organization Name

IslandLives Desk
- IslandLives Featured at APLA Conference
- more
Prostaglandins

Prostaglandins occur throughout the body in many different forms but those which have been best studied with reference to reproduction belong to the E and F series.

Prostaglandins are formed from arachidonic acid, an unsaturated fatty acid. Arachidonic acid is released from intracellular phospholipid stores under the effect of phospholipase A2. This is worthy of mention because corticosteroids block the action of phospholipase A2 and can therefore prevent prostaglandin synthesis and prostaglandin-mediated inflammation.

Once arachidonic acid is liberated from the membrane phospholipid stores, it is converted to prostaglandins G, H, E and F and to thromboxanes and prostacyclines. The conversion of arachidonic acid is mediated by cyclooxygenase (COX). There are two isoforms of COX in animals i.e. COX-1 which enables the physiological production of prostaglandins and COX-2, which is responsible for the production of prostaglandins in inflammation. Aspirin and indomethacin block the activity of COX and as a result, block prostaglandin synthesis.

Prostaglandins are important in many reproductive functions including the release of GnRH, ovulation, early recognition of pregnancy, luteolysis and parturition. Therefore it is not surprising to find that corticosteroids and indomethacin can block ovulation and that aspirin and indomethacin can inhibit luteolysis and even delay parturition.

During early pregnancy it is important that prostaglandin production is blocked so that the CL
**Research**

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- **Country:** US
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**Lab**
- **Study Status:**
- **Notes:**

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**Compounds — Add Compound**

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[Detailed List of Content]
Research

Marxism & Psychology Research Group (MPRG)

About

Welcome to the Marxism and Psychology Research Group (MPRG). This group is designed to promote interdisciplinary research at the intersection of Marxism and Psychology. Ultimately, we hope this site will bring scholars together to address some of the most important social issues facing modern society.

If you would like to bring attention to an upcoming conference or recent publication related to the theme of this group, please contact the site administrator. You may also want to post this information on the forum section of this site.

Feel free to look around. If any of your questions are not answered in the FAQ section, please don’t hesitate to contact the site administrator.

This site was developed by Dr. Michael Arfken of the University of Prince Edward Island.

Contact MPRG

Username: propel
Password: ********
Log in
Create new account
Request new password

Categories
Groups

Contact MPRG
Lacroix Research Group

This site features the research program of Christian Lacroix in Developmental Plant Morphology at the University of Prince Edward Island.

Dr. Christian Lacroix, Dean of Science, researches plant structures from a developmental perspective. His research highlights relationships between morphologically different structures that share similar developmental pathways. His current research interests include leaf complexity in seed-bearing plants, developmental aspects of floral organ identity, and the biology of the Gulf of St. Lawrence Aster.

Dr. Lacroix, has been a full-time faculty member in the Department of Biology at the University of Prince Edward Island since August 1, 1990. He was granted tenure and promoted to Associate Professor in July 1995 and became full professor in 2003. His field of specialty is Developmental Plant Morphology and teaches Plant Science related courses.
Research
Goal to have a rich and fully defined community framework for participation

Quarterly Roadmaps for code changes and new releases starting January 2010

Quarterly Releases with new Solution Packs in each

Islandora/RIRI Institutes summer 2010