Online Interactive Maps

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With special thanks to the members at the Cyberinfrastructure for Network Science Center and the Mapping Science exhibit advisory board.

Statewide IT Conference at Indiana University
Bloomington, IN

September 24, 2012
Google Map JavaScript API was used to implement both maps with two aggregation layers for each. The geographic map aggregates to the **state level** and the **city level**. The science map has a high level of aggregation of 13 top-level scientific **disciplines** and a low level of 554 **sub-disciplines**.
The geographic map at **state level**.

The geographic map at **city level**.
Search result for “corn”
Icons have same size but represent different #records

Click on one icon to display all records of one type.
Here publications in the state of Florida.
Search result for “Miscanthus,” a special energy biomass crops for second generation biofuel.

Detailed information on demand via original source site for exploration and study.
The science map at 13 top-level scientific disciplines level.

The science map at 554 sub-disciplines level.
Thermal tolerant avidase from Acidothermus cellulolyticus

Abstract

The invention provides a thermal tolerant (thermotolerant) cellulase, AvIII, that is a member of the glycoside hydrolase (GH) family. AvIII was isolated and characterized from Acidothermus cellulolyticus and, like many cellulases, the disclosed polypeptide and its derivatives may be useful for the conversion of biomass into biofuels and chemicals.

Inventors: Ding, Shi-You (Golden, CO), Adney, William S. (Golden, CO), Vinzant, Todd B. (Golden, CO), Himmel, Michael E. (Lafayette, CO)
Assignee: Midwest Research Institute (Kansas City, MO)

Date: April 29, 2008

United States Patent: 7,364,890

(1 of 1)
MAGE-A3/12 Metastatic Cancer Treatment With Anti-MAGE-A3/12 TCR-Gene Engineered Lymphocytes

This study has been suspended.

First Received on January 7, 2011. Last Updated on March 14, 2012

Sponsor: National Cancer Institute (NCI)
Information provided by: National Institutes of Health Clinical Center (CC)
ClinicalTrials.gov Identifier: NCT01273181

Purpose

Background:
- MAGE-A3/12 is a type of protein commonly found on certain types of cancer cells, particularly in metastatic cancer. Researchers have developed a process to take lymphocytes (white blood cells) from cancer patients, modify them in the laboratory to target cancer cells that contain MAGE-A3/12, and return them to the patient to help attack and kill the cancer cells. These modified white blood cells are an experimental treatment, but researchers are interested in determining their safety and effectiveness as a possible treatment for cancers that involve MAGE-A3/12.

Objectives:
- To evaluate the safety and effectiveness of anti-MAGE-A3/12 lymphocytes as a treatment for metastatic cancers that have not responded to standard treatment.

Eligibility:
- Individuals at least 18 years of age who have been diagnosed with metastatic melanoma, renal cell cancer, or another type of metastatic cancer that has not responded to standard treatment.

Design:
- Participants will be screened with a full medical history and physical examination, as well as blood and urine tests, tumor samples, and imaging studies.
- Participants will have leukapheresis to collect enough white blood cells for modification in the laboratory.
- Seven days before the start of anti-MAGE-A3/12 treatment, participants will have chemotherapy with cyclophosphamide and fludarabine to suppress the immune system in preparation for the treatment.

https://app.nihmaps.org
**Geospatial Analysis (Where)** A geospatial map of the US is used to show where what science is performed by whom.

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**Topical Analysis (What)** Science map overlays show where a person, department, or university publishes most in the world of science.
Related Talks

Monday

3:30pm

**Online Interactive Map: Say goodbye to tabular representation**
Chin Hua Kong and Katy Börner

<table>
<thead>
<tr>
<th>Room</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Research Superhighway</td>
<td>Monday 3:30 - 4pm</td>
</tr>
</tbody>
</table>

5pm

**Places & Spaces: Mapping Science**
Katy Börner, Michael Stamper, and Samantha Hale

<table>
<thead>
<tr>
<th>Room</th>
<th>Time</th>
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</thead>
<tbody>
<tr>
<td>The Human Element</td>
<td>Monday 5 - 5:30pm</td>
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</table>

Tuesday

9:30am

**Plug-and-play visualization with the Science of Science Tool**
David Polley, Chin Hua Kong, and Katy Börner

<table>
<thead>
<tr>
<th>Room</th>
<th>Time</th>
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<tbody>
<tr>
<td>The Research Superhighway</td>
<td>Tuesday 9:30 - 10am</td>
</tr>
</tbody>
</table>

11:30am

**VIVO@IU: An overview**
Robert Light, Chin Hua Kong, and Katy Börner

<table>
<thead>
<tr>
<th>Room</th>
<th>Time</th>
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</thead>
<tbody>
<tr>
<td>The Research Superhighway</td>
<td>Tuesday 11:30 - 12pm</td>
</tr>
</tbody>
</table>


Video and paper are at [http://www.scivee.tv/node/27704](http://www.scivee.tv/node/27704)
Sci² Tool – “Open Code for S&T Assessment”
http://sci2.cns.iu.edu

OSGi/CIShell powered tool with NWB plugins and many new scientometrics and visualizations plugins.

Sci2 Tool Usage at National Institutes of Health

Sci2 Tool now supports Web services and serves as a visual interface to publically available NIH RePORT RT Expenditure and Results RePORTER/ RePORTER data provided by NIH.

NETE A|V - Temporal Analysis

Find and select one or multiple PIs
**NETE A|V - Temporal Analysis**

Visualize portfolio of projects on the timescale

- Projects with award amounts
- Projects by IC funding
- Projects by PIs

**NETE A|V - Temporal Analysis – Projects with Award Amounts**

Four-variable visualizations, e.g. time, amounts, PIs and projects
Related Talks

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5pm

Places & Spaces: Mapping Science

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Plug-and-play visualization with the Science of Science Tool

David Polley, Chin Hua Kong, and Katy Börner

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VIVO@IU: An overview

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References


http://www.pnas.org/content/vol101/suppl_1/


http://scimaps.org/atlas


We are Hiring!

Senior Software Engineer/Research Analyst (3IT)  IU Job #6839

As Senior Software Engineer, you will perform research and programming for current and future externally funded research projects at the CNS Center. These projects include tools powered by the Cyberinfrastructure Shell (CIShell, http://cishell.org), an open-source software platform that supports the interchange of datasets and algorithms; MapIN, a map of Indiana’s expertise and resources; and other online interactive maps and web sites. You will participate in the entire software development process, from the collection of user stories through planning, implementation, testing, deployment, and documentation. You will also be expected to participate in the training new developers, and the creation of educational material for workshops. As Senior Software Engineer, you will have a chance to help set the standards of our team in many areas, including code, teamwork, product direction, and process.

Software Developer (2IT)  IU Job #6862

As a Software Developer, you will work in a team of four to perform research and programming for current and future externally funded research projects at the CNS Center. The main focus will be on tools powered by the Cyberinfrastructure Shell (CIShell, http://cishell.org). CIShell is an open-source software platform, built on Java and OSGi that allows developers and scientists to easily exchange datasets and algorithms, and bundle them into custom tools that serve the particular needs of research communities. You will participate in the entire software development process, from the collection of user stories through planning, implementation, testing, deployment, and documentation.
All papers, maps, tools, talks, press are linked from http://cns.iu.edu

CNS Facebook: http://www.facebook.com/cnscenter
Mapping Science Exhibit Facebook: http://www.facebook.com/mappingscience