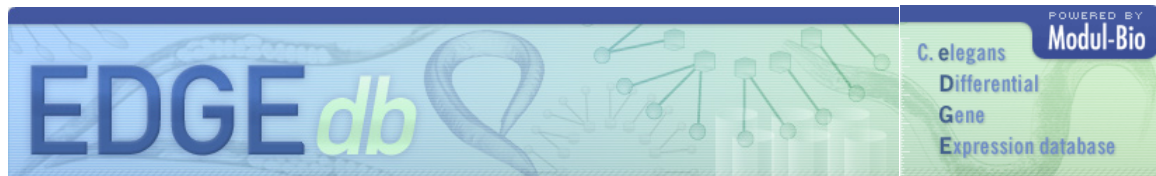


MBio-DB™

Custom Bioinformatic Database



Edge DB

C. elegans Differential Gene Expression DataBase

MBio-DB™

Modul-Bio can develop custom bioinformatic databases for managing, tracking and publishing your biological data. These databases can be either stand alone or fully integrated with our LIMS.

EdgeDB Project

C. elegans Differential Gene Expression DataBase

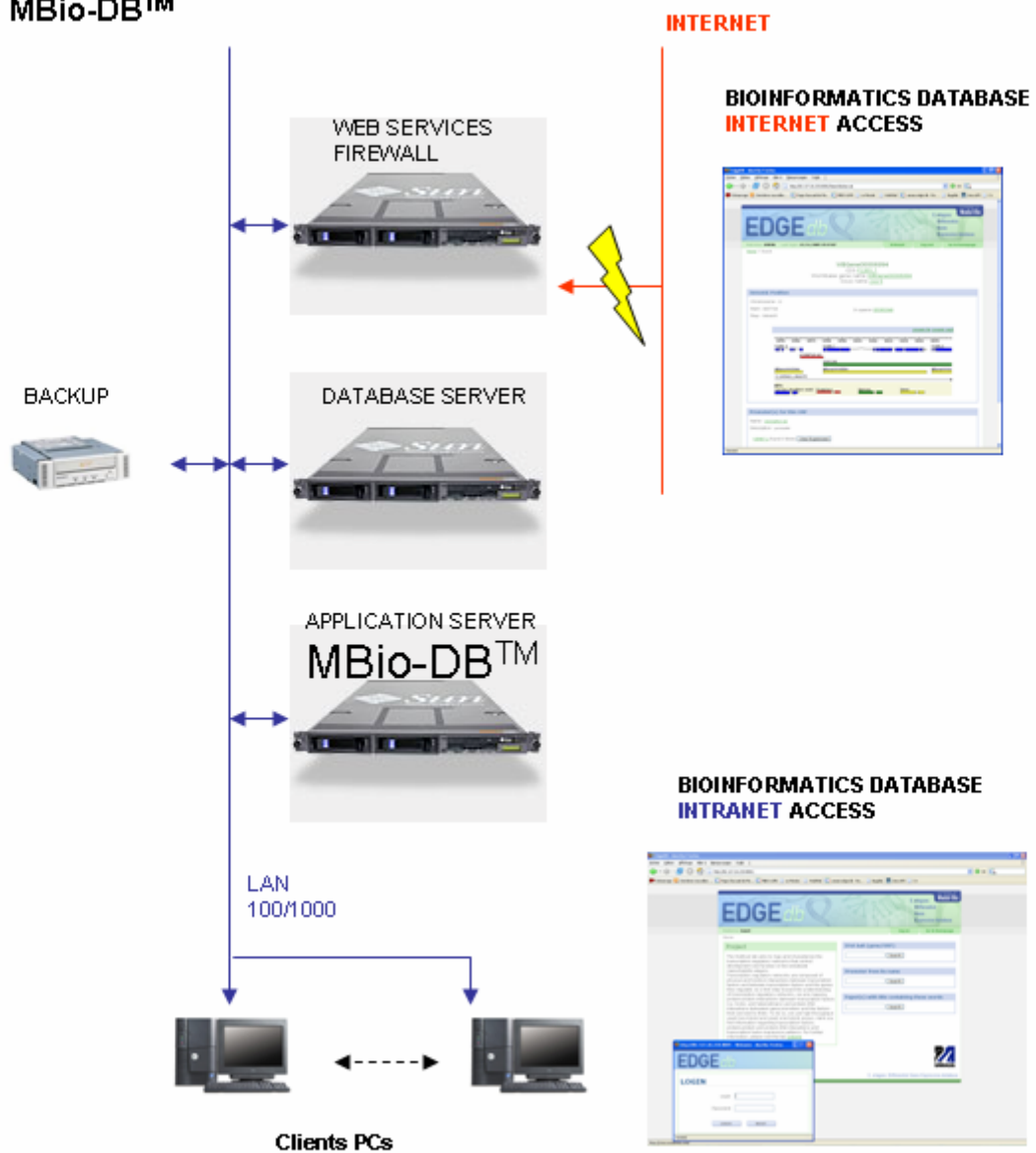
This project aims to find novel transcription factors and their target genes in *C. elegans*.

The Walhout lab aims to map and characterize the transcription regulatory networks that control development and function in the nematode *Caenorhabditis elegans*. Transcription regulatory networks are composed of physical and function interactions between transcription factors and between transcription factors and the genes they regulate. As a first step toward the understanding of transcription regulatory networks, we are mapping protein-protein interactions between transcription factors (i.e. homo- and heterodimers) and protein-DNA interactions between gene promoters and the factors that can bind to them. To do so, we use high-throughput yeast two-hybrid and yeast one-hybrid assays. Here you find information regarding transcription factors, protein-protein and protein-DNA interactions and transcription factor expression patterns.

Edge-DB architecture

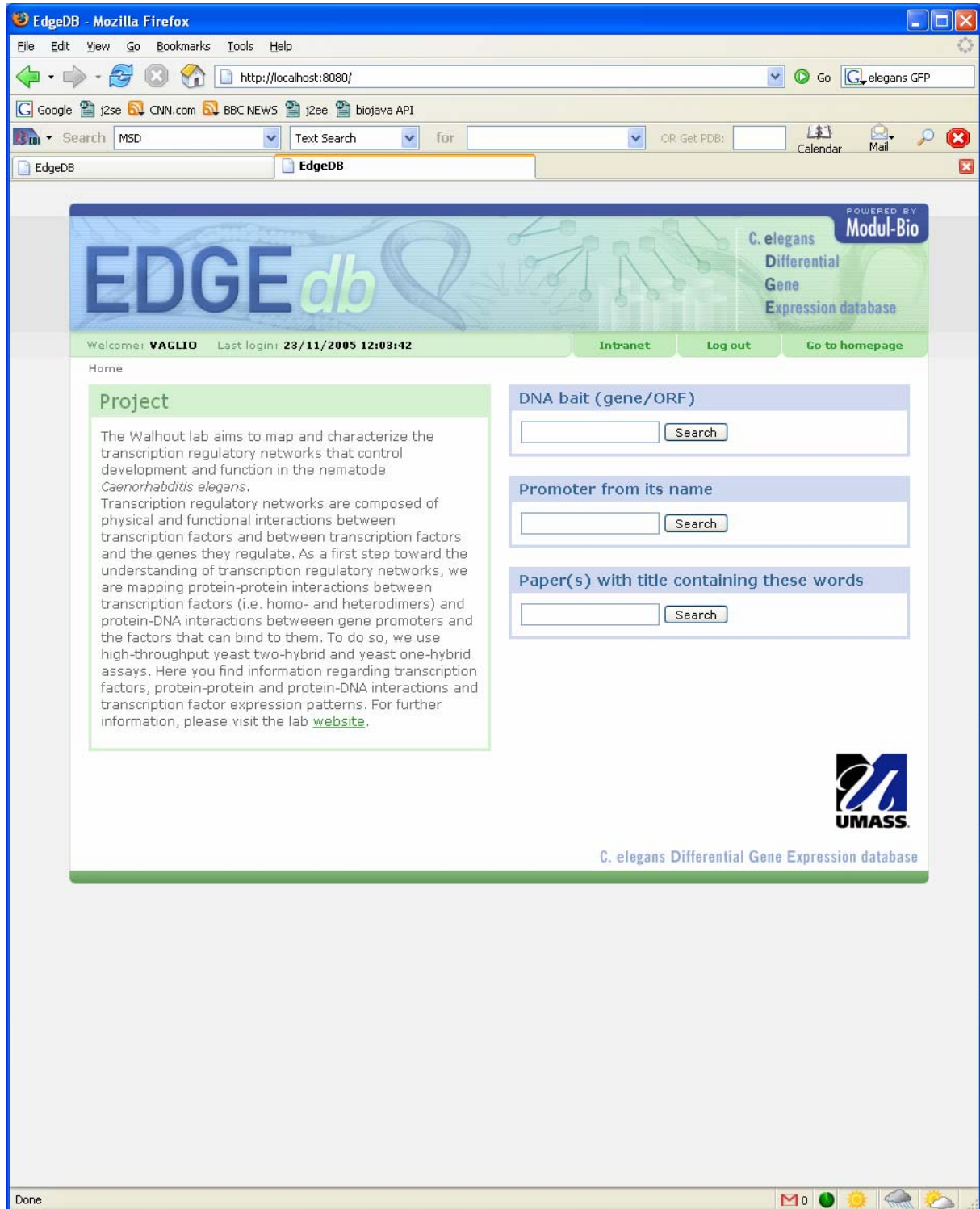
Modul-Bio Bioinformatics Database Architecture

MBio-DB™



MBio-DB™

Edge-DB home page



The screenshot shows a Mozilla Firefox browser window displaying the Edge-DB home page. The browser's address bar shows the URL `http://localhost:8080/`. The page header features the "EDGE db" logo and the text "C. elegans Differential Gene Expression database" powered by Modul-Bio. A navigation bar includes "Welcome: VAGLIO", "Last login: 23/11/2005 12:03:42", and buttons for "Intranet", "Log out", and "Go to homepage".

The main content area is titled "Home" and contains a "Project" section with the following text:

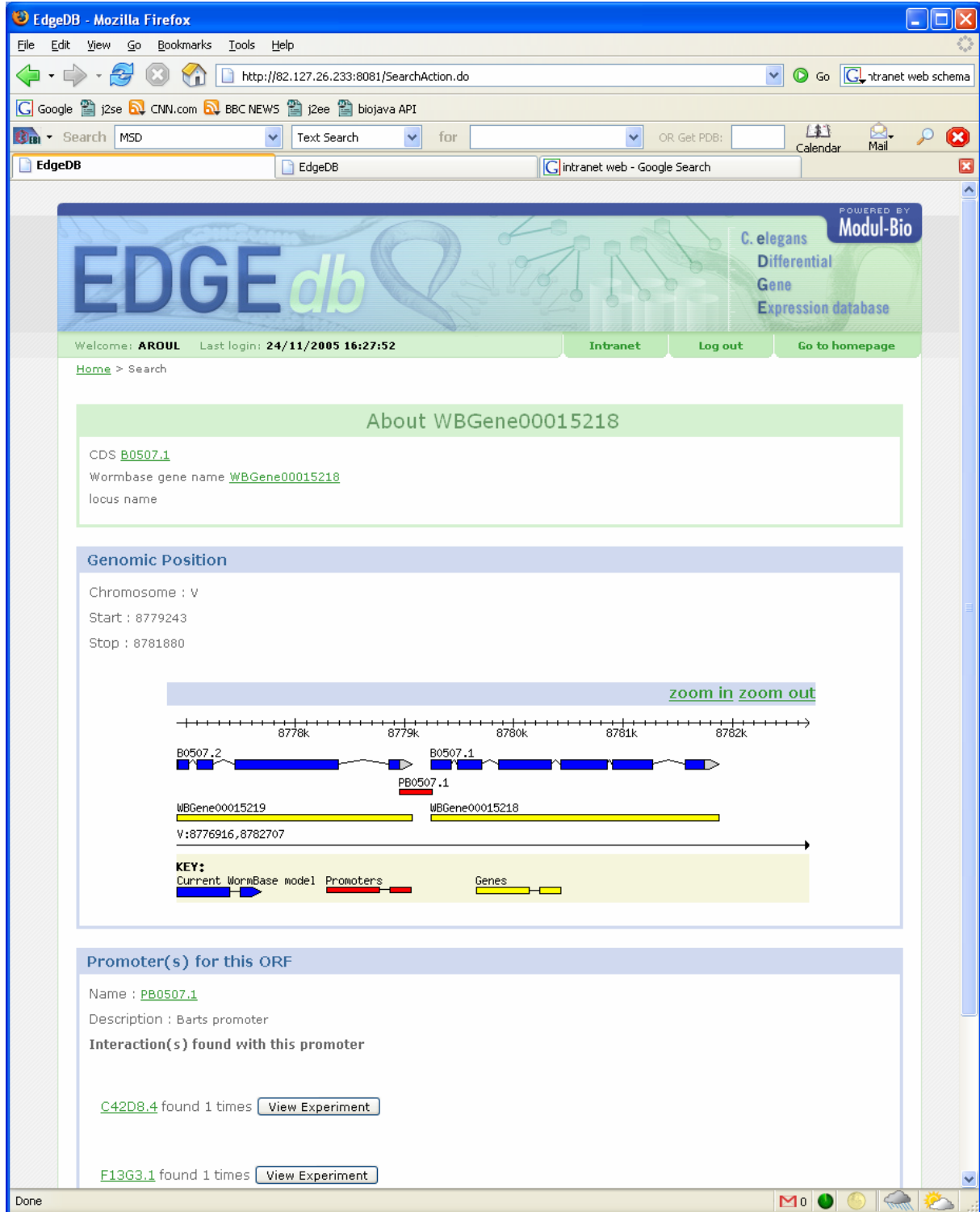
The Walhout lab aims to map and characterize the transcription regulatory networks that control development and function in the nematode *Caenorhabditis elegans*. Transcription regulatory networks are composed of physical and functional interactions between transcription factors and between transcription factors and the genes they regulate. As a first step toward the understanding of transcription regulatory networks, we are mapping protein-protein interactions between transcription factors (i.e. homo- and heterodimers) and protein-DNA interactions between gene promoters and the factors that can bind to them. To do so, we use high-throughput yeast two-hybrid and yeast one-hybrid assays. Here you find information regarding transcription factors, protein-protein and protein-DNA interactions and transcription factor expression patterns. For further information, please visit the lab [website](#).

On the right side of the page, there are three search boxes:

- DNA bait (gene/ORF)**:
- Promoter from its name**:
- Paper(s) with title containing these words**:

The bottom right corner of the page features the UMass logo and the text "C. elegans Differential Gene Expression database". The browser's status bar at the bottom shows "Done" and various system icons.

Gene result search
Genome graphical display



EDGE db POWERED BY Modul-Bio
 C. elegans Differential Gene Expression database

Welcome: **AROUL** Last login: **24/11/2005 16:27:52** [Intranet](#) [Log out](#) [Go to homepage](#)

[Home](#) > [Search](#)

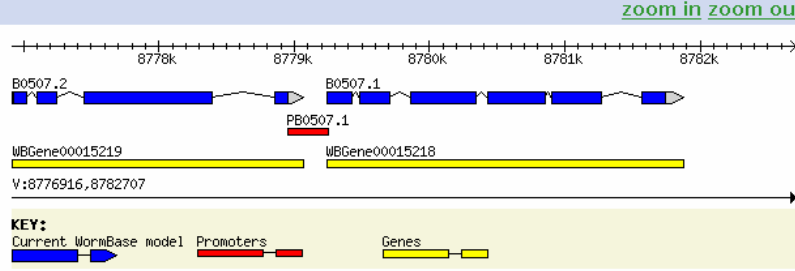
About WBGene00015218

CDS [B0507.1](#)
 Wormbase gene name [WBGene00015218](#)
 locus name

Genomic Position

Chromosome : V
 Start : 8779243
 Stop : 8781880

[zoom in](#) [zoom out](#)



WBGene00015219
 V:8776916..8782707

KEY:
 Current WormBase model Promoters Genes

Promoter(s) for this ORF

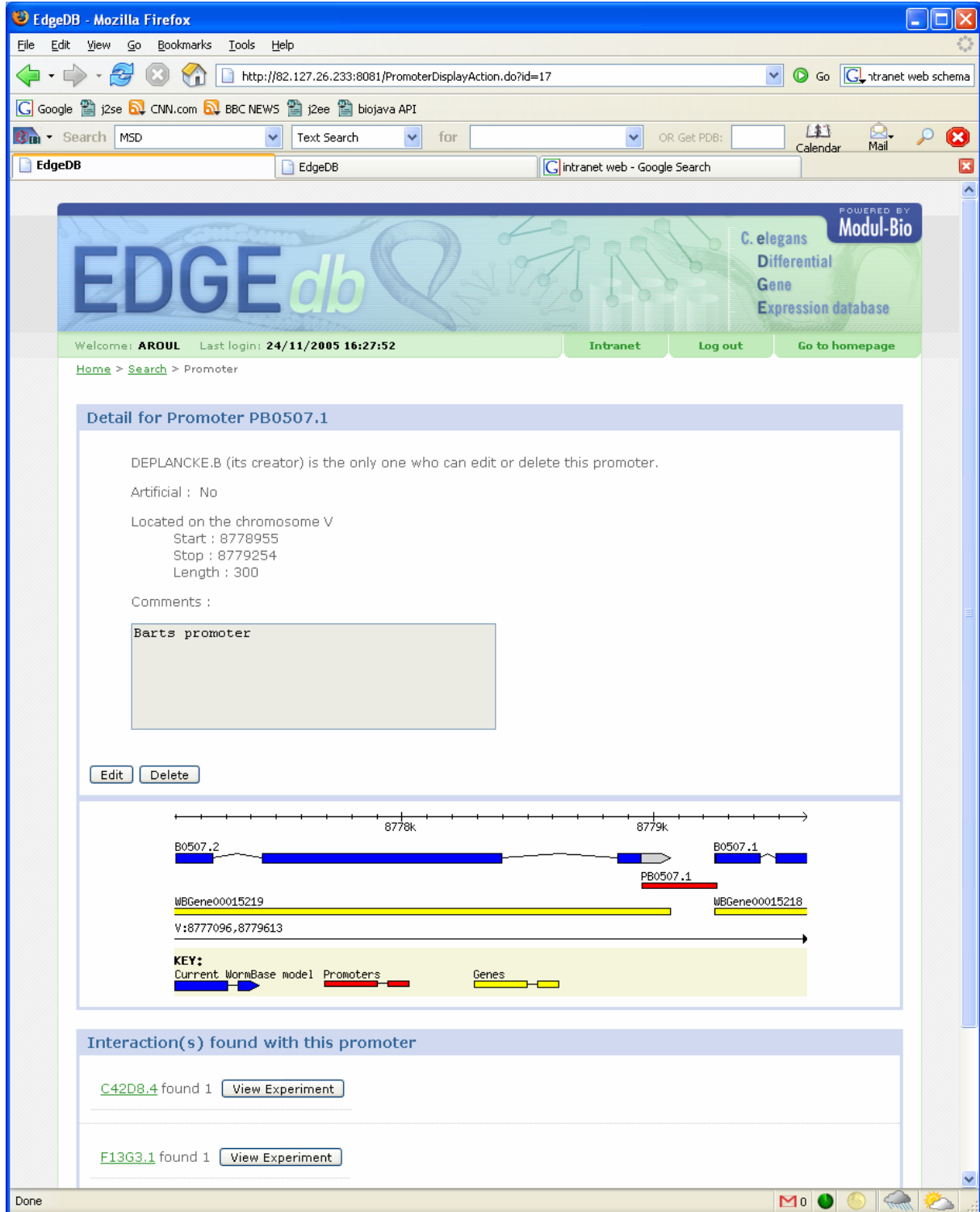
Name : [PB0507.1](#)
 Description : Barts promoter

Interaction(s) found with this promoter

[C42D8.4](#) found 1 times [View Experiment](#)

[F13G3.1](#) found 1 times [View Experiment](#)

Promoter page



EdgeDB - Mozilla Firefox

http://82.127.26.233:8081/PromoterDisplayAction.do?id=17

Google j2se CNN.com BBC NEWS j2se biojava API

Search MSD Text Search for OR Get PDB: Calendar Mail

EdgeDB EdgeDB Intranet web - Google Search

EDGEdb C. elegans Differential Gene Expression database POWERED BY Modul-Bio

Welcome: **AROUL** Last login: **24/11/2005 16:27:52** Intranet Log out Go to homepage

Home > Search > Promoter

Detail for Promoter PB0507.1

DEPLANCKE.B (its creator) is the only one who can edit or delete this promoter.

Artificial : No

Located on the chromosome V
 Start : 8778955
 Stop : 8779254
 Length : 300

Comments :
 Barts promoter

Edit Delete

8778k 8779k

B0507.2 PB0507.1 MBGene00015219 V:8777096,8779613

KEY:
 Current WormBase model Promoters Genes

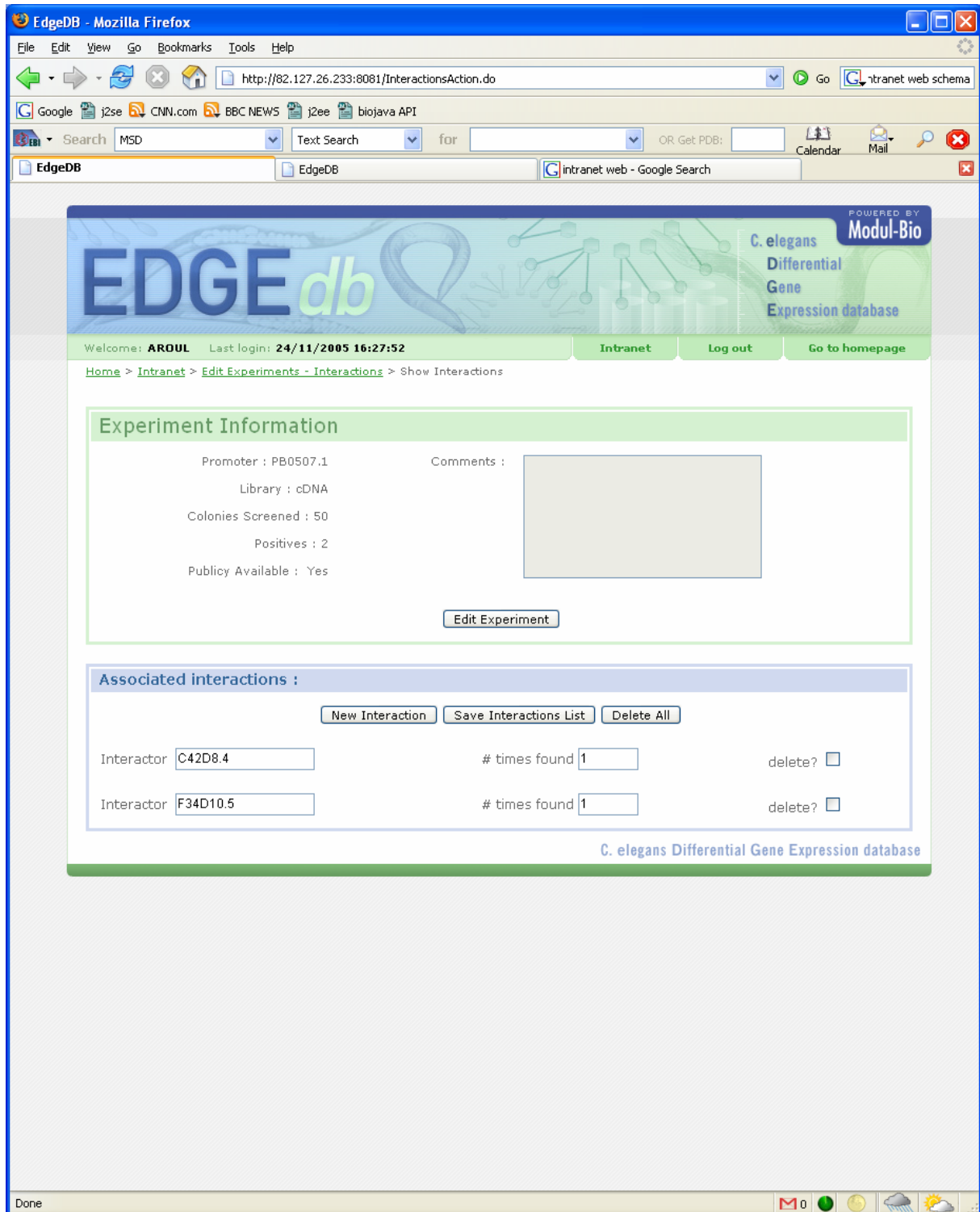
Interaction(s) found with this promoter

[C42D8.4](#) found 1

[F13G3.1](#) found 1

Done

View edit interactions



EdgeDB - Mozilla Firefox

File Edit View Go Bookmarks Tools Help

http://82.127.26.233:8081/InteractionsAction.do

Google j2se CNN.com BBC NEWS j2ee biojava API

Search MSD Text Search for OR Get PDB: Calendar Mail

EdgeDB EdgeDB intranet web - Google Search

EDGEdb C. elegans Differential Gene Expression database

POWERED BY Modul-Bio

Welcome: **AROUL** Last login: **24/11/2005 16:27:52** [Intranet](#) [Log out](#) [Go to homepage](#)

[Home](#) > [Intranet](#) > [Edit Experiments - Interactions](#) > Show Interactions

Experiment Information

Promoter : PB0507.1 Comments :

Library : cDNA

Colonies Screened : 50

Positives : 2

Publicity Available : Yes

[Edit Experiment](#)

Associated interactions :

[New Interaction](#) [Save Interactions List](#) [Delete All](#)

Interactor	<input type="text" value="C42D8.4"/>	# times found	<input type="text" value="1"/>	delete?	<input type="checkbox"/>
Interactor	<input type="text" value="F34D10.5"/>	# times found	<input type="text" value="1"/>	delete?	<input type="checkbox"/>

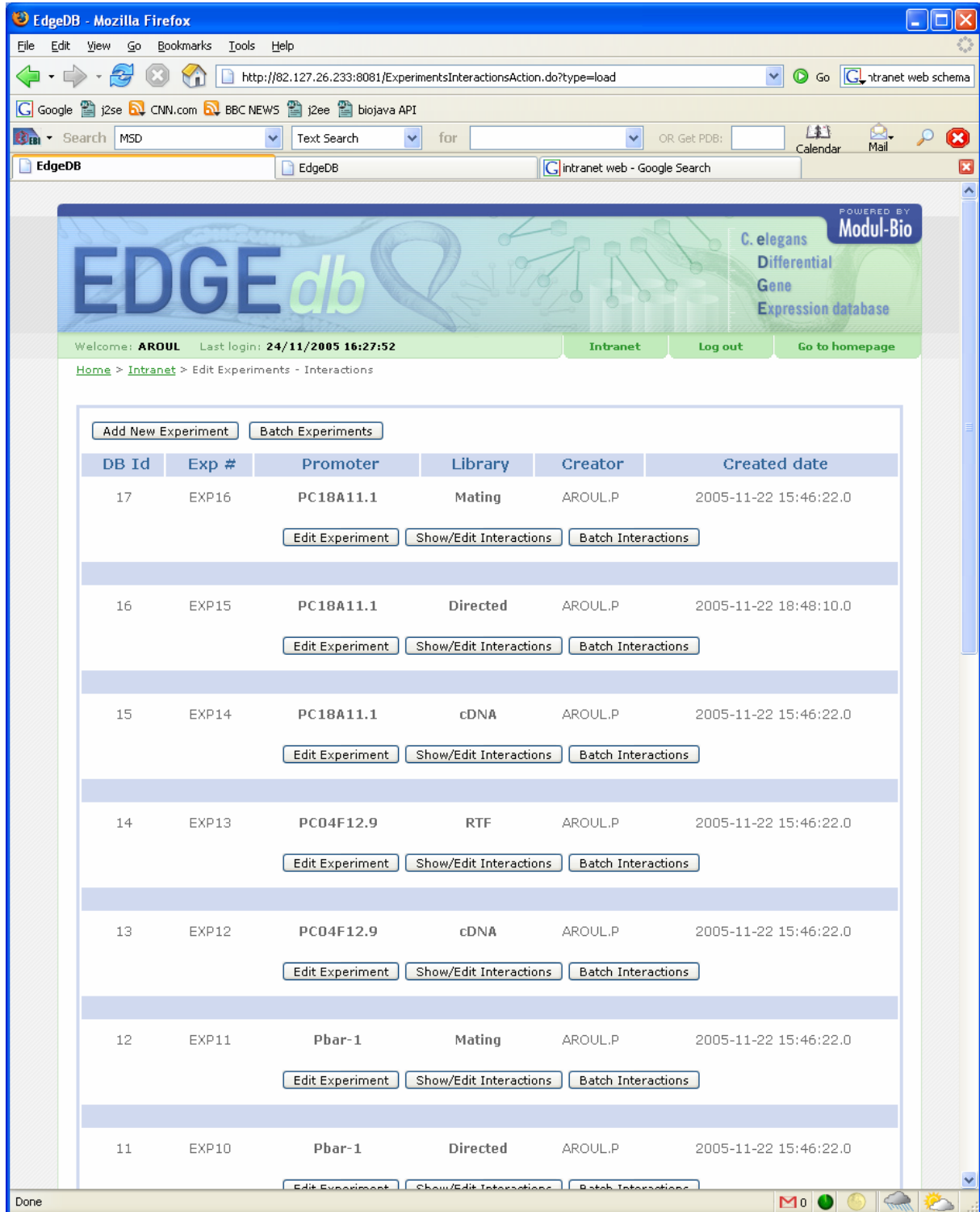
C. elegans Differential Gene Expression database

Done

View expression data

The screenshot displays the EdgeDB web application interface. At the top, the browser window is titled 'EdgeDB - Mozilla Firefox'. The address bar contains the URL 'http://82.127.26.233:8081/ViewExpressionDataAction.do'. The page header features the 'EDGE db' logo and identifies the database as 'C. elegans Differential Gene Expression database'. A user login bar indicates 'Welcome: AROUL Last login: 24/11/2005 16:27:52'. The main content area is titled 'Expression Data for Promoter PB0507.1' and includes a link 'Add Expression Data'. Below this, a section 'WT by user AROUL.P' contains a comment with two side-by-side images of a C. elegans worm. The left image shows green fluorescence, and the right image shows a brightfield view with green fluorescence overlaid on the worm's body.

View edit experiments



Welcome: **AROUL** Last login: **24/11/2005 16:27:52**

[Intranet](#)
[Log out](#)
[Go to homepage](#)

[Home](#) > [Intranet](#) > Edit Experiments - Interactions

[Add New Experiment](#) [Batch Experiments](#)

DB Id	Exp #	Promoter	Library	Creator	Created date
17	EXP16	PC18A11.1	Mating	AROUL.P	2005-11-22 15:46:22.0
Edit Experiment Show/Edit Interactions Batch Interactions					
16	EXP15	PC18A11.1	Directed	AROUL.P	2005-11-22 18:48:10.0
Edit Experiment Show/Edit Interactions Batch Interactions					
15	EXP14	PC18A11.1	cDNA	AROUL.P	2005-11-22 15:46:22.0
Edit Experiment Show/Edit Interactions Batch Interactions					
14	EXP13	PC04F12.9	RTF	AROUL.P	2005-11-22 15:46:22.0
Edit Experiment Show/Edit Interactions Batch Interactions					
13	EXP12	PC04F12.9	cDNA	AROUL.P	2005-11-22 15:46:22.0
Edit Experiment Show/Edit Interactions Batch Interactions					
12	EXP11	Pbar-1	Mating	AROUL.P	2005-11-22 15:46:22.0
Edit Experiment Show/Edit Interactions Batch Interactions					
11	EXP10	Pbar-1	Directed	AROUL.P	2005-11-22 15:46:22.0
Edit Experiment Show/Edit Interactions Batch Interactions					

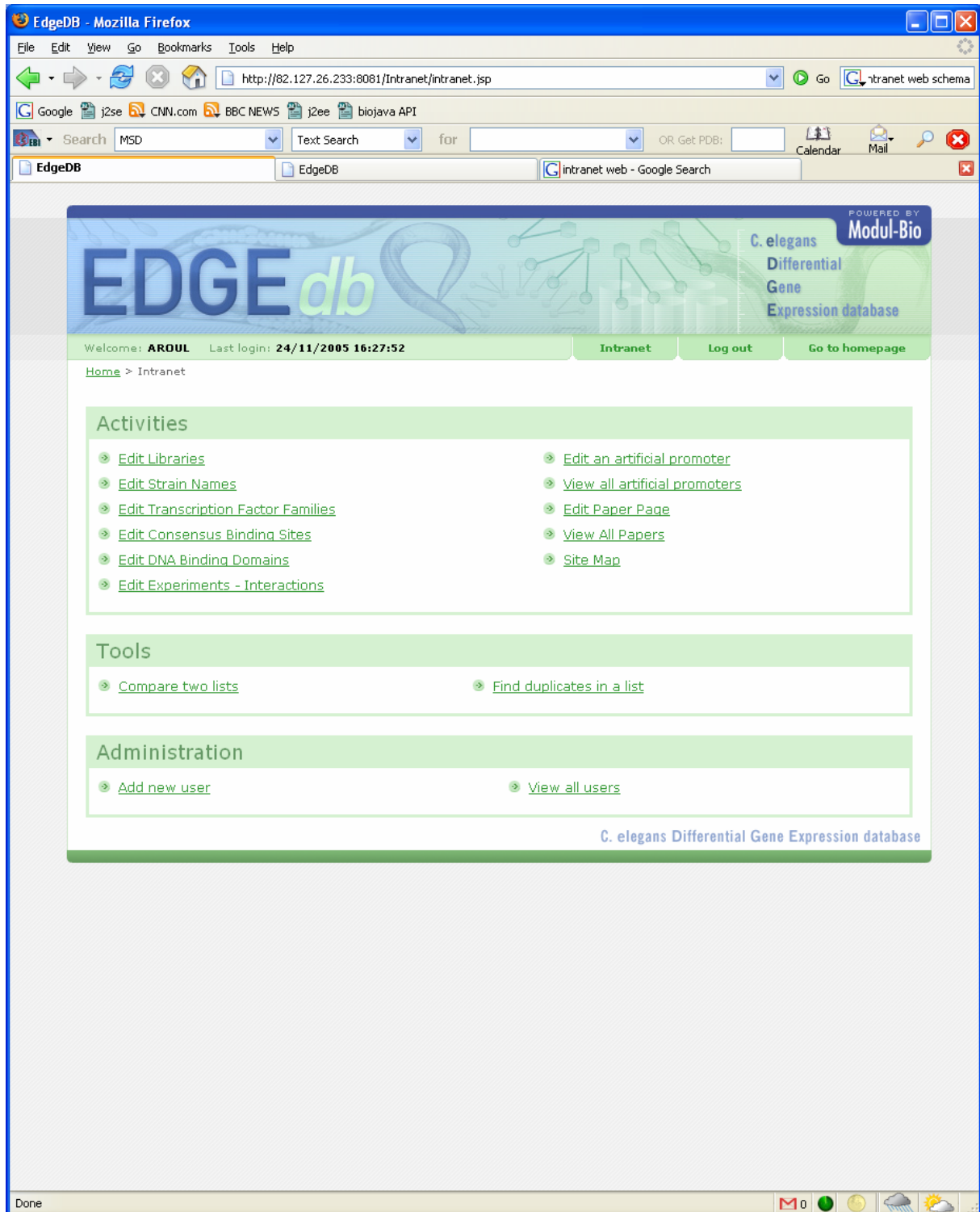
Edge-DB has a restricted access for authorized scientists working on this project. Once logged, they have access to many features such as the management of :

- Libraries
- Strains
- Transcription factors
- Consensus binding sites
- DNA binding domains
- Artificial promoters
- Papers
- Experiments
- Interactions
- alignment tools
- protein interaction manager
- and other administration tools



The screenshot shows a web browser window with the address bar displaying "http://82.127.26.233:8081 - Welcome - Mozilla Firefox". The page title is "EDGEdb" and the main heading is "LOGIN". Below the heading, there are two input fields: "Login" and "Password". At the bottom of the form, there are two buttons: "LOGIN" and "RESET". The browser's status bar at the bottom shows "Done" and a mail icon with the number "0".

Administration tools



EdgeDB - Mozilla Firefox

File Edit View Go Bookmarks Tools Help

http://82.127.26.233:8081/Intranet/intranet.jsp

Google j2se CNN.com BBC NEWS j2ee biojava API

Search MSD Text Search for OR Get PDB: Calendar Mail

EdgeDB EdgeDB intranet web - Google Search

POWERED BY Modul-Bio

EDGEdb C. elegans Differential Gene Expression database

Welcome: **AROUL** Last login: **24/11/2005 16:27:52** [Intranet](#) [Log out](#) [Go to homepage](#)

[Home](#) > [Intranet](#)

Activities

- [Edit Libraries](#)
- [Edit Strain Names](#)
- [Edit Transcription Factor Families](#)
- [Edit Consensus Binding Sites](#)
- [Edit DNA Binding Domains](#)
- [Edit Experiments - Interactions](#)
- [Edit an artificial promoter](#)
- [View all artificial promoters](#)
- [Edit Paper Page](#)
- [View All Papers](#)
- [Site Map](#)

Tools

- [Compare two lists](#)
- [Find duplicates in a list](#)

Administration

- [Add new user](#)
- [View all users](#)

C. elegans Differential Gene Expression database

Done

Contact information :

Modul-Bio SAS

Email : info@modul-bio.com

<http://www.modul-bio.com>

Tel : 33 (0)4 91 22 33 05

Fax : 33 (0)4 91 22 36 11

232 Boulevard Sainte Marguerite
13 273 MARSEILLE Cedex 9
FRANCE