

# **MAKING THE WEB WORK FOR SCIENCE: NATURE PUBLISHING GROUP'S PERSPECTIVE**



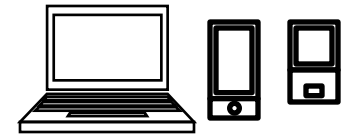
**Howard Ratner**  
**CTO, Nature Publishing Group**  
**CENDI/NFAIS**  
**8 December 2008**



# SIMPLE CONCEPT

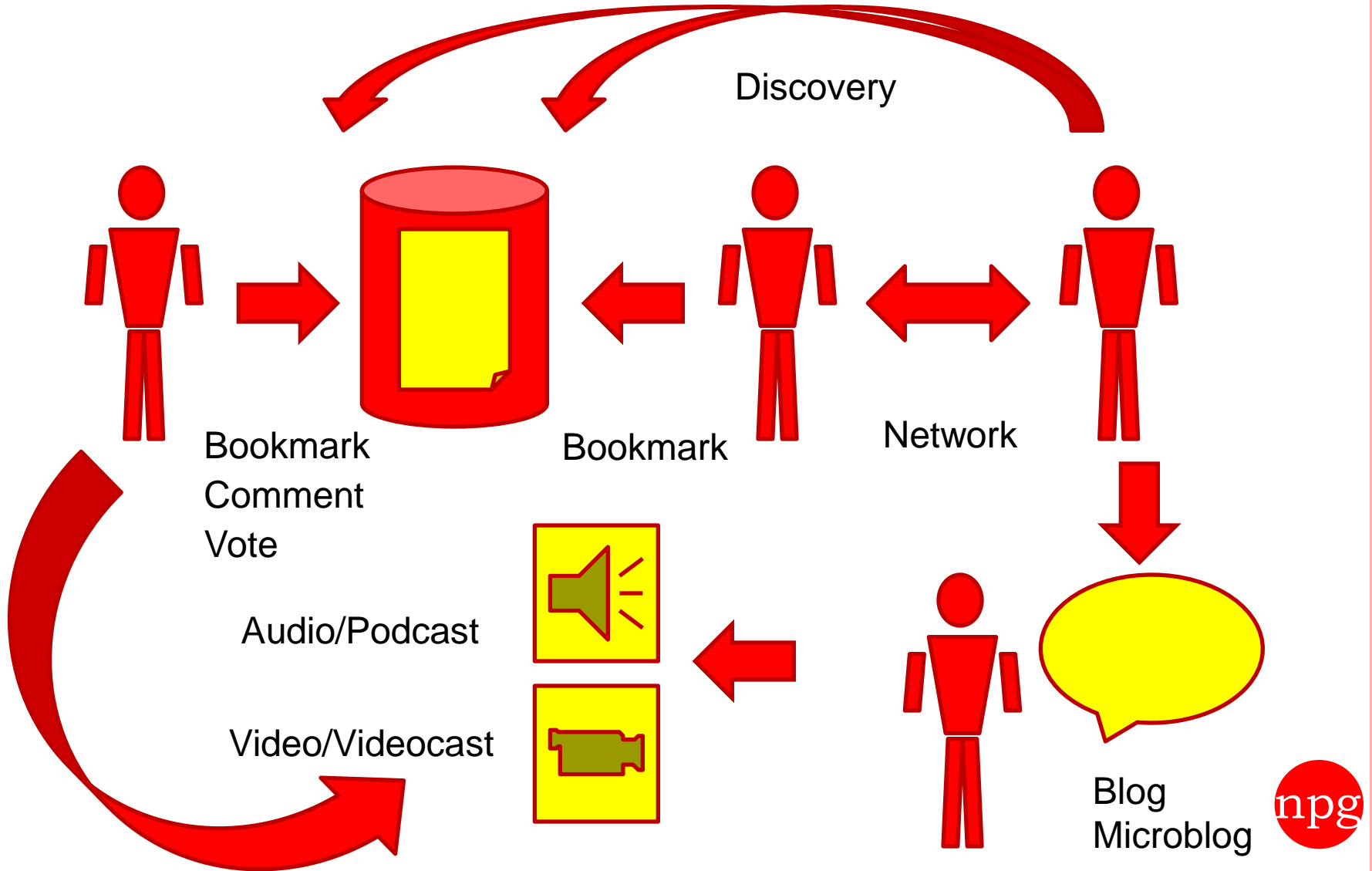
- Scientists are inquisitive
- They are innovative
- They are active learners
- The web is a great sandbox for scientists
- Publishers can play too

# Scientific Research 2.0



Network

Discovery



26 November 2008



## Palaeontology: Turtle origins

A newly described fossil species of turtle yet discovered.

### Latest news

- ▶ Cosmic-ray hot spots puzzle
- ▶ Greenland gambles on warmer, milder
- ▶ South Africa suspends water scientists

## nature journal



- ▶ Contents 27 Nov 08
- ▶ Podcasts ▶ Videos

## Inside nature.com



### Publications A-Z

- ▶ browse the nature.com publications index



### Nature Reports

- ▶ Stem Cells
- ▶ Climate Change
- ▶ Avian Flu



### naturejobs.com

- ▶ Science jobs - free posting available now!

## Latest research

- ▶ Ostwald's 'rule of stages' demonstrated *Nature Physics*
- ▶ Relevance of osteoproliferation as an outcome parameter in ankylosing spondylitis **FREE** *Nature Clinical Practice Rheumatology*
- ▶ Regulation of haeme oxygenase-1 for treatment of neuroinflammation and brain disorders **FREE** *British Journal of Pharmacology*

## Special Feature



**NEW Lab Offers coupons now available at [www.nature.com/laboffers](http://www.nature.com/laboffers)**

Select and print coupons on products used in your lab!

Lab Offers connects researchers with top suppliers offering year-end discounts on cell cultures, antibodies, lab consumables, imaging equipment, DNA and RNA isolation products, gene targeting equipment.

## Explore nature.com



**SciBX: Science-Business eXchange**  
A unique source of comment and analysis on translational science

Brought to you by Nature & BioCentury  
▶ FREE ACCESS throughout November '08

HTML content launches Nov 2008!  
▶ Recommend SciBX to your library



**Blogs - from nature.com and beyond**

▶ **Highlighted blogs**  
Climate Feedback: an informal forum for debate and commentary on climate science.

Hairy Museum of Natural History: a funny and accessible natural history blog with a cult following.  
▶ **Blogsphere buzz**



### Launch pad

- ▶ Elucian Islands
- ▶ Scintilla
- ▶ OTMI



### Podcasts

- ▶ Nature
- ▶ NeuroPod

[see more](#) ▶



### Society partners

- ▶ International society publishing partnerships



### Gateways and Databases

<b>Journal home</b>
Advance online publication
Current issue
Nature News
Archive
Supplements
Web focuses
Multimedia
About the journal
For authors and referees
Online submission
Advertising
Reprints and permissions
Nature Awards



→ **Current Issue**  
Volume 456 Number 7222

## This week's news


- [Methane bursts from frozen tundra](#)
- [Astronomers revisit a blast from the past](#)
- [Indonesia to reject tagging of HIV carriers](#)
- [More from Nature News](#)

## Latest Research


- [Spliceosomal cleavage generates the 3' end of telomerase RNA](#)
- [Live-animal tracking of individual stem/progenitor cells in their niches](#)
- [Caenorhabditis elegans dauer stage requires insulin-like growth factor to ration lipid reserves and energy](#)
- [More research](#)



**Nature podcasts**  
Listen to *Nature's* weekly science show








**Nature videos**  
Watch *Nature* authors discuss their research



Get all the latest news at  
**naturenews**

**subscribe to Nature**

**Subscribe**

-  Sign up for e-alerts
-  Recommend to your library
-  Live newsfeeds
-  Submit a correspondence
-  *Nature* in the news (external link)

**Nature**  
JOBS of the week

**Post Doctoral Research Fellow**  
University of the West Indies,  
Mona Campus  
Kingston, Jamaica

[Journal home](#)

[Advance online publication](#)

[Current issue](#)

[Nature News](#)

[Archive](#)

[Supplements](#)

[Web focuses](#)

[Multimedia](#)

[Nature podcast](#)

[Video streaming](#)

[Google earth](#)

[Blogs](#)

[About the journal](#)

[For authors and referees](#)

## Online video streaming archive

For selected articles and letters *Nature* will present streaming videos that feature interviews with scientists behind the research and analysis from *Nature* editors. You will need the free [Flash browser plugin](#).

Tell us what you think of *Nature's* online video at [nature@nature.com](mailto:nature@nature.com).

### Browse video archive



#### Ancient tsunamis

The 2004 Indian Ocean tsunami was not the first of its kind, according to research in *Nature*. Two groups of scientists have found sedimentary evidence for possible predecessors to the 2004 event in Thailand and Sumatra. They discuss their findings [here](#).



#### X-rays

New research provides evidence for an observation first described over 50 years ago - that peeling sticky tape emits x-rays. Hear the authors discuss their work and see the phenomenon in action.



#### Missions in Space-Time

Nature Video presents five short films on the future of physics. Recorded at the 2008



#### Antikythera Mechanism - Free access

New interpretations of the Antikythera Mechanism reveal

- [Sign up for e-alerts](#)
- [Recommend to your library](#)
- [Live newsfeeds](#)
- [Submit a correspondence](#)
- [Nature in the news \(external link\)](#)

### naturejobs

#### [Positions for plant genomics and systems biology](#)

Partner Institute of Computational Biology  
Shanghai

#### [Deputy Director](#)

NYU Langone Medical Center  
New York, NY

[More science jobs](#)

[Post a job for free](#)

News: [Enceladus shoots supersonic jets of water](#)

[stop ticker](#) [previous](#) [next](#)

Search Nature News:

[search](#)

## Top story



### [Carbon dioxide discovered on distant planet](#)

21 November 2008

- [Astronomers claim first snaps of planets beyond the Solar System](#)
- [Planet gallery](#)

## Latest stories



### [Enceladus shoots supersonic jets of water](#)

Saturn's icy moon spouts water vapour from its cracks.  
26 November 2008



### [How the turtle got its shell](#)

Chinese fossil forces palaeontologists to rethink turtle origins.  
26 November 2008



### [Cosmic-ray hot spots puzzle researchers](#)

Proton discovery may cast doubt on dark-matter theories.  
26 November 2008

## Special : [Darwin 200](#)

As a prelude to the 200th anniversary of Charles Darwin's birth on 12 February 1809, this [Nature News special](#) looks at how his work on natural selection is still [provoking debate](#); finds out how [previous Darwin anniversaries](#) were celebrated; rounds up the [events](#) in the coming year that will celebrate the man's life and works; and [much more](#). There's also a stunning [gallery of eyes](#) - the organ so brilliantly 'designed' that Darwin feared it may block the acceptance of natural selection.



## News blog

Check [The Great Beyond](#) for an up-to-the-minute

## More stories

→ [Minerals yield signs of early plate tectonics](#)

most recent

commented

- [Older scientists publish more papers](#) **P**
  - 30 comments
  - 28 October 2008
- [Time to test time](#) **P**
  - 29 comments
  - 10 November 2008
- [Why plastic isn't always fantastic](#) **P**
  - 13 comments
  - 06 November 2008
- [Climate researchers 'should cut their carbon footprint'](#) **P**
  - 13 comments
  - 21 November 2008
- [Should healthy people take statins too?](#) **P**
  - 13 comments
  - 10 November 2008

Key:

**P** content requires [subscription](#) or payment



**Nature News**

**JOBS** of the week


[Faculty Position](#)





CLIMATE RESEARCH:  
reducing uncertainties  
finding solutions

ADVERTISEMENT

-  [My account](#)
-  [E-alert sign up](#)
-  [Register](#)
-  [RSS feed](#)

 [Login](#)

# nature REPORTS climate change

the news behind the science, the science behind the news

- [home](#)
- [current issue](#)
- [journal club](#)
- [archive](#)
- [blogs](#)
- [podcast](#)
- [about](#)

## latest features

### [Coal-to-gas: part of a low-emissions future?](#)

Its proponents say that underground coal gasification combined with carbon capture could allow the continued use of coal — without unacceptable emissions. But is the technology likely to live up to expectations?

### [The real swindle](#)


Climate change must be reported more carefully to help distinguish convergent agreement from legitimately contentious issues, Max Boykoff argues.

[» more features](#)

SUPPORTING SPONSOR



## site resources

-  [Download the free digital issue](#)
-  [Listen to the climate podcast](#)
-  [Newsletter signup](#)
-  [RSS feed](#)
-  [Podcast RSS feed](#)

## latest news

### [Climate change a security risk for EU, say bloc's foreign policy chiefs](#)

[Society](#)

EU Observer

### [Skeptics on Human Climate Impact Seize on Cold Spell](#)

[Anthropogenic change](#)

## comment and analysis

### [Audio: Leave it in the ground](#)

Governments can't limit the use of fossil fuel if they keep promoting its extraction, says George Monbiot on the Nature Podcast.

### [Europe's 2020 vision](#)

With new climate and energy legislation, the EU aims to stride

## latest research

### [Baffin basks](#)

[Cryosphere](#)

The melting of ancient ice caps on Baffin Island in the Canadian Arctic shows that the twentieth century was the island's warmest since AD 350.

### [Warm swarms](#)

[Paleoclimate](#)

## search & explore

### search

### explore

- [Anthropogenic change](#)
- [Atmospheric science](#)

[Cyberinfrastructure for Biology](#)

## Home Page

[Home Page](#) | [All Pages](#) | [Recently Revised](#) | [Authors](#) | [Feeds](#) | [Export](#) |

## Resources for the Biological Cyberinfrastructure

This is a companion wiki page for an article in Nature Reviews Genetics by [Lincoln Stein](#):

[Stein, L. D. Towards a cyberinfrastructure for the biological sciences: progress, visions and challenges. Nature Rev. Genet. 9, 678-688 \(2008\).](#)

*Biology is an information-driven science. Large-scale data sets from genomics, physiology, population genetics and imaging are driving research at a dizzying rate. Simultaneously, interdisciplinary collaborations among experimental biologists, theorists, statisticians and computer scientists have become the key to making effective use of these data sets. However, too many biologists have trouble accessing and utilizing these electronic data sets and tools effectively. A "cyberinfrastructure" is a combination of databases, network protocols and computational services that brings people, information and computational tools together to perform science in this information-driven world.*

This companion wiki gives pointers to some of the current and pending implementations of a biological cyberinfrastructure.

Our intention is to keep this wiki up to date with help from the community. Please feel free to edit sections as you wish, adding new pages or updates as appropriate.

If you'd like a quick overview of what a wiki is (or a refresher course in how to make edits) see the [Wiki Help](#) page.

For general comments and questions please use the relevant thread on [Nature Network](#) instead and see also [correspondence](#)

The content here has been split up into individual pages:

- [Centralized Online Databases and Analysis Systems](#)

Cyberinfrastructure for Biology

## Editing Community Annotation Hubs

```

Community annotation hubs are the result of opening up a
[centralized
database]
(http://nrgwiki.nature.com/cyberinfrastructureforbiology/show/Centralized+Online+Databases+and+Analysis+Systems) or
toolkit to direct contribution by the community. A
familiar mainstream example is the [Flickr]
(http://www.flickr.com)
photo-sharing site. A Flickr user uses the tools the site
provides to
upload and organize his digital photograph album, while
other users
add value to these photographs by adding descriptive tags
and
ratings. The result is a searchable database of images that
is far
more richly annotated than a finite group of curators could
achieve on
their own.

Community annotation systems are growing in popularity in
biology as
well. An early example is the
Entrez [GeneRif]
    
```

Submit

as Howard Ratner | [Cancel](#) (unlocks page)

### Markdown+itex2MML formatting tips ([basics](#), [extended syntax](#), [metadata](#))

For a complete list of LaTeX commands supported here, see the [itex2MML Commands Summary](#).

<code>_your text_</code>	→	<i>your text</i>
<code>**your text**</code>	→	<b>your text</b>
<code>`my code`</code>	→	<code>my code</code>
<code>* Bulleted list</code>	→	• Bulleted list
<code>* Second item</code>		• Second item
<code>1. Numbered list</code>	→	1. Numbered list
<code>1. Second item</code>		2. Second item
<code>Definition list</code>	→	Definition list
<code>: is useful</code>		is useful
<code>[link name](URL)</code>	→	<a href="#">link name</a>
<code>![Alt text](URL)</code>	→	Image
<code>## Header ##</code>	→	<b>Header</b>
<code>### Subheader ###</code>		<b>Subheader</b>
<code>#### Etc. ####</code>		<b>Etc.</b>
<code>***</code>	→	Horizontal ruler
<code>&lt;http://url&gt;</code>	→	Auto-linked
<code>&lt;email@add.com&gt;</code>		

# nature.com podcasts

Search    [Advanced search](#)

## Nature Podcast

[nature podcast](#)

This week we bring you news from the year's biggest neuro jamboree, stick our heads into the oldest turtle fossil ever found, talk to the author of a new book on photosynthesis, and discover the source of water vapour jets on Saturn's sixth moon.



ITUNES RSS

[podcasting help](#)

## all nature.com podcasts

### Nature Podcast



Each week *Nature* publishes a free audio show. It's hosted by Adam Rutherford and Kerri Smith and features reporters Geoff Brumfiel and Charlotte Stoddart.

Every show features the best from the week's edition of *Nature* including interviews with the people behind the science, and in-depth commentary and analysis from journalists

[Nature Podcast](#)[RNAi Gateway Podcast](#)[NeuroPod](#)[Climate Change Podcast](#)

# nature.com launchpad

Search

go

Advanced search



## ▶ Elucian Islands

*Nature's* home in the virtual world of Second Life. Elucian Islands is home to scientific exhibitions, ongoing projects and regular events.



## ▶ History of the Journal Nature

A website about *Nature's* history — and the history of science — since 1869. With essays, timelines, interactive forum and videos.



## ▶ Connotea

Free online reference management for clinicians and scientists.



## ▶ Nature Network

NPG's free Web 2.0 toolkit connecting scientists worldwide — facilitating personal homepages, networking, online discussions, open or private groups and tagging.



## ▶ Nature Newsblog

A blog as well as an experiment in user participation.



## ▶ Nature Precedings

A free document-sharing service for communicating preliminary findings and pre-publication research.



## ▶ Scintilla

Scintilla keeps you up to date with papers, news and science weblogs.



## ▶ Nature Protocols

A new interactive online resource for high-quality laboratory protocols.



## ▶ Nature Reports Avian Flu

In 2007 NPG will be launching a new avian flu website. Here, we present links to NPG's existing resources on avian flu and the H5N1 virus.



## ▶ Nature Reports Climate Change

*Nature Reports: Climate Change* covers the news behind the science and the science behind the news of global climate change, arguably the most far-reaching challenge of this century.



## ▶ Nature Reports Stem Cells

A community site with news, research, comment and analysis about stem cells and the social, economic and political issues surrounding them.



## ▶ Open Peer Review


*Nature* Peer Review Trial and Debate

## Free online reference management for all researchers, clinicians and scientists

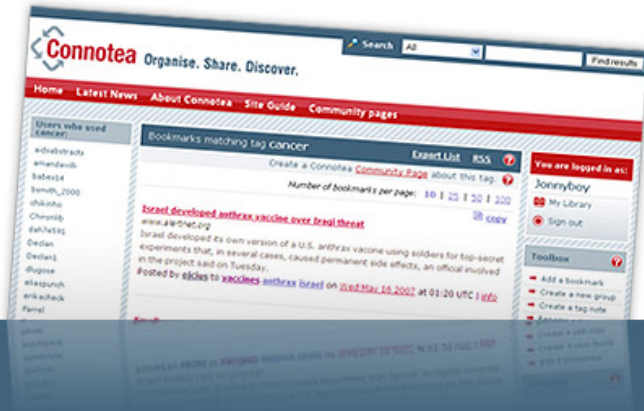
Completely free, no download

[→ sign up now](#)

Welcome back, hratner.

 [My Library](#)

 [Logout](#)



### Five reasons to use Connotea

#### How it works

1

#### Find

You find a reference



2

#### Save

One click saves it on Connotea



3

#### Customize

Add your own keywords for easy retrieval



1. Save and organize links to your references
2. Easily share references with colleagues
3. Access references from any computer
4. One click is all it takes
5. Easy to use. Start creating your library today

- [→ Learn more](#)
- [→ Watch a short video \(2m 41s\)](#)

#### Explore

[Home](#)  
[Recent Activity](#)  
[Popular Links](#)  
[Popular Tags](#)

#### Beginner's guide

[About Connotea](#)  
[How It Works](#)  
[Getting Started](#)  
[Introductory Videos](#)

#### Account details

[My Account](#)  
[Advanced Settings](#)  
[My Library](#)  
[My Community Profile](#)

#### Help

[Site Guide](#)  
[FAQs](#)  
[Mailing Lists](#)  
[Contact Us](#)

#### Advanced

[Browser Buttons](#)  
[Connotea Code](#)  
[Connotea Web API](#)  
[Community Pages](#)

**hratner's groups:**

- Interactive Publishing ([edit](#))
- NTP ([edit](#))

**hratner's tags:**

By Usage | A - Z

- Find:
- ajax
  - analytics
  - Annette Thomas
  - annotation
  - apple
  - astronomy
  - atom
  - blog
  - blogs
  - books
  - cartoons
  - computers
  - Creationism

**hratner's bookmarks** EXPORT LIST RSS ?

*Create a [Profile](#) on the [Community Pages](#). ?*

Number of articles per page: [10](#) | [25](#) | [50](#) | [100](#)

[edit](#) [delete](#)

**[5min - Life Videopedia](#)**

[www.5min.com](#)

Cool site with practical videos!

Posted by [hratner](#) and [2 others](#) to [video](#) on [Thu Feb 14 2008](#) at 21:56 UTC | [info](#) | [related](#)

[edit](#) [delete](#)

**[Access The Free Dictionary from Anywhere](#)**

[www.thefreedictionary.com](#)

Posted by [hratner](#) to [widget dictionary](#) on [Sat Nov 17 2007](#) at 16:58 UTC | [info](#) | [related](#)

[edit](#) [delete](#)

**[Clusty](#)**

[clusty.com](#)

Posted by [hratner](#) and [13 others](#) to [search](#) on [Thu Nov 15 2007](#) at 03:35 UTC | [info](#) | [related](#)

[edit](#) [delete](#)

**[Google Photo Search](#)**

[www.google.com](#)

**You are logged in as**

**hratner**

- [My library](#)
- [Log out](#)

**Toolbox** ?

- [Add a bookmark](#)
- [Create a new group](#)
- [Create a tag note](#)
- [Rename a tag](#)
- [Bookmarklets](#)
- [Import from local file](#)
- [Export my library](#)
- [Settings](#)
- [Advanced settings](#)
- [Report a problem](#)

**Related tags:**

- uploaded
- digital
- Suchmaschine

GLOBAL  
HOMEGLOBAL  
FORUMSGLOBAL  
GROUPSGLOBAL  
PEOPLEGLOBAL  
BLOGS

GLOBAL MENU

LOCAL MENU



## SIGN IN

Email

Password

 Remember me

[Forgotten password?](#)


New to Nature Network?

## Popular tags

- [seminar](#)
- [biology](#)
- [lecture](#)
- [science](#)
- [medicine](#)
- [talk](#)
- [view all tags](#)

## Explore nature.com

- [nature.com](#)
- [naturejobs](#)

## Nature Network: connecting scientists

## What can you do on Nature Network?

Connect



Keep in touch with colleagues. Make new contacts.

Discuss



Talk about research and scientific issues.

Explore



Read the [blogs](#). Browse the [forums](#) and [profiles](#).

Get Started




Search site



[Take a short video tour of Nature Network.](#)


## What's new on Nature Network

[Highlights from Nature Network for Tuesday, Nov 25:](#)

## Blogs



[In which books are judged by covers](#)

Jennifer Rohn on 15 Nov 2008





Boston

London

 Hello  
Howard Ratner!

[You](#) [Create](#) [Activity](#)
→ [Your network snapshot](#)→ [Your profile](#)→ [Your network](#)→ [Your groups and forums](#)→ [Getting started](#)→ [log out](#)

Logged in successfully

## Welcome to Nature Network

### Most recent activity from your network

-  **BLOG COMMENT** [Maxine Clarke](#) posted comment on [Small successes](#)
-  **BLOG COMMENT** [Maxine Clarke](#) posted comment on [First Words.](#)
-  **FORUM REPLY** [Maxine Clarke](#) posted reply to [yet another Editorial on the Italian Science scenario...](#)

[» your network snapshot](#)


### What's new on Nature Network

[Highlights from Nature Network for Tuesday, Nov 25:](#)

### Blogs

[Most commented on](#)
[Most recent](#)


#### [In which books are judged by covers](#)

[Jennifer Rohn](#) on 15 Nov 2008

Many years ago when my first novel Experimental Heart was in the process of being repeatedly rejected, editors would tell my agent that its main

[Search site](#)

[Watch](#)
 [short video about Nature Network](#)
[Invite a colleague to join](#)


ADVERTISEMENT




We're seeking  
postdocs with a



## Welcome to nature blogs

Find [great science blogs](#), keep up to date with [the latest buzz](#) and read the latest posts from [our editorial staff](#) on Nature Blogs, Nature's community-run blog tracking and indexing service.

## Search natureblogs

Enter search term or blog name:

## Blogs by subject

- [All](#)
- [Bioinformatics](#)
- [Chemistry](#)
- [Clinical Practice & Research](#)
- [Earth & Environment](#)
- [Life Sciences](#)
- [Neuroscience](#)
- [Physics](#)
- [Science and Society](#)

## Blogs on nature.com

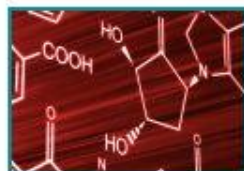
- [By NPG Staff](#)
- [On Nature Network](#)

## Blogs by top tags

- [genetics](#)
- [dna\\_network](#)
- [news](#)
- [web](#)



### BY NPG STAFF



#### [The Sceptical Chymist](#)

The chemistry blog from the nature.com journals.



#### [The Great Beyond](#)

Our up-to-the minute digest of what is being reported elsewhere.



#### [Climate Feedback](#)

A forum for debate and commentary on climate science in our journals and others, in the news, and in the world at large.



#### [Indigenus](#)

The Nature India blog - find out who or what is making news in the Indian scientific community.



### BY OTHERS



#### [And the Next Top Turkey Inspector Will Be?](#)

26 Nov 2008

[WSJ.com: Health Blog](#)

Associated Press With Thanksgiving just around the corner, the Health Blog wants to know who will be making sure our holiday birds remain safely delectable? The hunt for a new Secretary of Agriculture hasn't received as much attention as the filling of other cabinet positions in the Obama...



#### [Järki ja tieto](#)

26 Nov 2008

[Tiede blogit](#)

Luonnontieteiden kehitys on sekä tukenut arkijärjen mukaista kuvaa maailmasta että osoittanut sen rajat.



#### [Engage with Grace: An Initiative About Life and Death](#)

26 Nov 2008

[DiabetesMine: diabetes, life, health, community](#)

In honor of THANKSGIVING this year, a special message about life and death from Alexandra



[Log in](#)

[Register](#)

[Home](#) [Latest Documents](#)

Search:  All documents  [Advanced search](#)

- [Bioinformatics \(194\)](#)
- [Biotechnology \(111\)](#)
- [Cancer \(50\)](#)
- [Chemistry \(91\)](#)
- [Developmental Biology \(26\)](#)
- [Earth and Environment \(89\)](#)
- [Evolutionary Biology and Ecology \(168\)](#)
- [Genetics \(86\)](#)
- [Immunology \(40\)](#)
- [Microbiology \(52\)](#)
- [Molecular Cell Biology \(123\)](#)
- [Neuroscience \(150\)](#)
- [Pharmacology \(52\)](#)



### Contribute, comment and collaborate

Nature Precedings is a free online service from NPG that enables researchers in the life sciences to openly share preliminary findings, solicit community feedback, and claim priority over discoveries by posting preprint manuscripts, white papers, technical reports, posters, and presentations.

[Submit a document](#)

### Active Discussions



[Phosphate rich organic manure as fertiliser](#)  
DMR Sekhar et al.

[9 comments](#), last 14 days ago



[Electrocortical activity can predict pianist's proficiency](#)  
Malcolm M. H. Mills

[3 comments](#), last 19 days ago

### Highlighted Collections



[AFP-Biosapiens 2008](#)  
Sequence and structure genomics have generated a wealth of data. Both the number and the diversit...

### Latest documents

BROWSE: [Manuscripts](#) [Posters](#) [Presentations](#) [All](#)

[Sign up for alerts](#)



[1st INCF Workshop on Needs for Training in Neuroinformatics](#)  
David Willshaw

The INCF workshop on Needs for Training in Neuroinformatics was



[Allen Brain Atlas Reports](#)  
Based on data from the [Allen Brain Atlas-Mouse Brain](#), a project of the



## Genetics

By Kenna Shaw

This interplay between genetics and society makes it crucial for all of us to grasp the science behind these techniques in order to better inform our decisions at the doctor, at the grocery store, and at home. As we seek to cultivate our understanding of modern genetics, we need to explore not only what we know about genetics, but also what data and evidence support these claims. Only ...

[Read More ...](#)

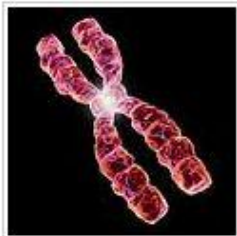
## Learn. Connect. Explore.

**FACULTY:** Hundreds of evidence-based articles from Nature Publishing Group for you to share with your students

**STUDENTS:** Authoritative scientific overviews and a community full of answers to help you master science

▶ Upload Content

▶ Invite a Friend!



### Chromosomes and Cytogenetics

Editor: Clare O'Connor

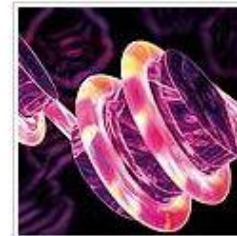
Cytogenetics is the study of chromosomes and their role in heredity. ...



### Evolutionary Genetics

Editor: Richard Kliman, Bob Sheehy

"Evolutionary genetics" is a somewhat redundant expression. After ...



### Gene Expression and Regulation

Editor: Laura Hoopes

How does a gene, which consists of a string of DNA hidden in a cell's ...

#### MY PROFILE

[Edit](#) | [Log Out](#)



#### Howard Ratner

Location: New York, NY, United States  
I Am A: Nature Education Team Member

#### MY PEOPLE

[View All](#)



#### Luigi Squillante

Location: New York, NY, United States  
I Am A: Nature Team Member



#### Kenna Shaw

Location: Washington, DC, United States  
I Am A: Nature Education Team Member

#### MY TOPICS

[View All](#)

Joining a TOPIC ROOM connects you to a global community of science scholars, faculty, and students focused together on a particular concepts in genetics. Click on the 'Add to My Topics' link near the top of any Topic Room.

#### MY MESSAGES

[View All](#)

**Michael Powers** Received 10/17 Unread  
Hello Howard

**Michael Powers** Received 10/17 Unread  
Friend Request Accepted

#### MY DISCUSSIONS

[View All](#)

You have not yet subscribed to any discussions.

#### MY GROUPS

[View All](#)

Scitable study and discussion groups are expanding

Welcome to Second Nature. These islands are now part of the Elucian Islands archipelago, Nature Publishing Group and Macmillan Publishers's expanded home in the virtual world of Second Life. The islands are home to exhibitions, ongoing projects, regular events on a wide range of topics and state-of-the-art buildings dedicated to the communication of new ideas.

The islands have recently been redeveloped and expanded to include a large central island dedicated to all areas of learning, and this website is in the process of being updated: please check back soon for more news.

In the meantime, if you'd like to learn more, please contact us at [elucianislands@nature.com](mailto:elucianislands@nature.com)



### Next event



#### Virtual Conference on Climate Change and CO2 Storage

Elucian Islands and Imperial College invite you to their first ever virtual conference.

Location: [Elucian Islands](#)  
Date: December 3, 2008  
Time: 7-11am PST, 3-7am GMT

### getting started



#### Getting started in Second Life

Learn more about Nature in Second Life and choose your avatar

[sign up now](#)

» see basics

### featured exhibit



#### Cities and Geography in Second Life

The Centre for Advanced Spatial Analysis has focused on representing cities and urban geography in Second Life.

[visit exhibit](#)

» see all exhibits

### places to visit



#### International Spaceflight Museum

One of the most highly regarded locations in Second Life, the ISM is a museum hosting exhibits and events about real world spacecraft, rockets and space travel.

[visit island](#)

» see more places



**It's no longer just about  
publishing content**

**It's about enabling users  
to communicate**

**THANK YOU!**

Howard Ratner

[h.ratner@natureny.com](mailto:h.ratner@natureny.com)

