

New Scientist

FILE DESCRIPTION

New Scientist, is the global authority on science and technology news. Written by the largest international network of award-winning science journalists, **New Scientist** provides an exciting, enlightening read while explaining the social, economic, and environmental consequences of the latest research.

Each week **New Scientist** breaks the world's science news, provides hard-hitting opinion pieces, focusing on a wide range of issues such as cloning, quantum physics, marijuana, the digital revolution, GM foods, global warming, the universe and time. The articles are concise, highly factual and explain all you need to know about the biggest scientific issues of today in an accessible and eminently readable style, and because of this **New Scientist** is a must read for anyone interested in the scientific and technological advances of tomorrow.

New Scientist magazine and its website NewScientist.com have won over 40 awards including the *British Society of Magazine Editors* Award of the year 1997, the *PPA Chairman of Judges'* Award for Consistent Excellence in 1997, the *American Institute of Physics* Science Writing Award in 1997 and the *American Society for Microbiology* Communications Award in 1998.

The database contains the complete text of every article published in **New Scientist** with the exception of the advertisements and the appointments sections.

SUBJECT COVERAGE

New Scientist covers every aspect of science and technology, including the following topics:

- Agriculture
- Astronomy
- Biotechnology
- Computers and the Digital Revolution
- Ecology
- Engineering
- Environment
- Energy
- Evolution
- General Scientific News
- Medical Research
- Medicine
- Oceans
- Space Exploration
- Telecommunications
- Technology

TIPS

USE FILE 369

to locate articles about the latest science and technology news; to track the development of new technologies; to follow the latest in medical research.

USE /TI

to search words appearing in the Title field.

S MARS(W)PROBE/TI

USE SH=, /SH

to find an article published in a desired section.

S THIS(W)WEEK/SH

S SH=IN BRIEF

USE AU=

to search articles written by particular authors.

S AU=JUDGE, MICHAEL?

USE /TX

to search for terms appearing in text section.

USE THE S operator

to ensure the terms appear in the same paragraph.

S METAL(W)FOAM?(S)ALUMINUM/TX

USE FORMAT 9

for the complete text of all articles.

T S1/9/1

DIALOG FILE DATA

Inclusive Dates: 1994 to May 2010

Update Frequency:

Closed (Approximately 70 records per update)

File Size: 59,188 records

CONTACT

New Scientist is provided by Reed Business Information Ltd. Questions concerning file content should be directed to:

Reed Business Information Ltd

Contact: Angela Bourton

151 Wardour Street

London W1F 8WE

United Kingdom

Phone: +44 0207-331-2735

E-Mail: Enquiries@newscientist.com

SAMPLE RECORD

DIALOG(R)File 369:NEW SCIENTIST
(c) 2000 Reed Business Information Ltd. All rts. reserv.

AA= 00000046 16522274.600 (THIS IS THE FULLTEXT)
/TI,/XF Caught napping
AU=,CS= CLAYTON, JULIE; Bristol ; Julie Clayton is a freelance writer and BBC
website producer based in Bristol
JN=,SO= New Scientist, vol. 165, no. 2227, 42
PD=,PY= February 26, 2000
SN= ISSN: 0262-4079
LA=,RT=,DT= LANGUAGE: English RECORD TYPE: Fulltext DOC. TYPE: Journal
/SH,SH=,/XF SECTION HEADING: Features
WD= WORD COUNT: 2309

/AB,/LP,/TX,/XF,/XT

TEXT: Depression, Parkinson's and obsessive compulsive disorder may have a common cause. They could all be triggered when a tiny part of the brain dozes off, as Julie Clayton explains

MIEKO had no quality of life any more, says her surgeon Ali Rezai from the Cleveland Clinic in Ohio. For 15 years, she'd coped with Parkinson's disease, but then her medication began to fail her, and she found herself alternating between the uncontrollable wild movements created by her drugs and being locked motionless.

/TX

For Antonia it was a different story. She had endured agonising pain around her face for seven years since an operation to relieve the pressure of a blood vessel against a nerve. Drugs did nothing. Last month, both found instant relief when Rezai implanted a small electronic pacemaker-like device deep inside their brains.

Such devices appear to work by interrupting the excessive neuronal firing that causes chronic pain or by smoothing out the strange rhythmical brain activity that causes rigidity and tremors, much as a heart pacemaker flattens the unusual beat rhythms of a fibrillating heart. They aren't a new way of dealing with pain or Parkinson's disease--stimulating the spine to interrupt pain signals was first used in the 1960s. But, if a controversial new theory is correct, surgeons like Rezai may soon be getting ready to fit these "pacemakers" in a whole new group of patients with psychiatric conditions such as obsessive compulsive disorder (OCD) and depression, or desperately distracting sensations such as ringing in the ears (tinnitus) or schizophrenic hallucinations.

According to Rodolfo Llinas, a neuroscientist at the New York Medical Center, and Daniel Jeanmonod, a neurosurgeon at the University Hospital in Zurich, these conditions are united by a common feature. The researchers believe that they are all characterised by strange, slow rhythms of neural activity originating in a walnut-sized brain region called the thalamus.

This activity, they say, looks just as though one tiny part of the brain has fallen asleep. The resulting disruption in the flow of signals to the rest of the brain would produce the abnormal patterns of activity that could account for bizarre perceptions and neurological symptoms as wide-ranging as tinnitus and depression.

Until recently, the thalamus was considered to be no more than a simple relay station sitting at the top of the brainstem, controlling the flow of information from our senses to the brain's outer cortex. But interest in the region has grown since neuroscientists discovered that when we're awake, it is working overtime, passing on and modifying fast "gamma" rhythms of activity to the cortex that seem to equate to conscious perception (XREF AA="16422104.60 (New Scientist, 30 October 1999, p 28).

(. . .)

/CR,/XF

References and Notes:

Further reading: Thalamocortical dysrhythmia by Rodolfo R. Llinas and others, Proceedings of the National Academy of Sciences, vol 97, p15 222 (1999) For more about thalamocortical circuits see <http://info.med.yale.edu/neurobio/mccormick/mccormick1.html>

SEARCH OPTIONS

BASIC INDEX

SEARCH SUFFIX	DISPLAY CODE	FIELD NAME	INDEXING	SELECT EXAMPLES
—	—	All Basic Index Fields	Word	S CLEVELAND(W)CLINIC
/AB	AB	Abstract ¹	Word	S OBSESSIVE(1W)DISORDER/AB
/CR	CR	Cited Reference ²	Word	S THALAMOCORTICAL(W)DYSRHYTHMIA/CR
/LP	LP	Lead Paragraph	Word	S PARKINSON?(1W)DISEASE/LP
/SH	SH	Section Heading ³	Word	S FEATURES/SH
/TI	TI	Title	Word	S CAUGHT(W)NAPPING/TI
/TX	TX	Text	Word	S BRAIN(W)ACTIVITY/TX
/XF	—	All Basic Index Fields Except Full Text	Word	S COMMON(W)CAUSE?/XF
/XT	XT	Extract ¹	Word	S QUALITY(1W)LIFE/XT

¹ Abstract and Extract are both searched using /AB or /XT.

³ Searchable in the Basic Index and in the Additional Indexes.

² Use the S operator (S) between terms that are within the same reference.

ADDITIONAL INDEXES

SEARCH PREFIX	DISPLAY CODE	FIELD NAME	INDEXING	SELECT EXAMPLES
AA=	AA	New Scientist Accession Number	Phrase	S AA=16522274.600
AU=	AU	Author	Phrase	S AU=BRENNER, MICHAEL?
—	AZ	DIALOG Accession Number		
CS=	CS	Corporate Source	Word & Phrase	S CS=(FREELANCE(W)WRITER) S CS=JULIE CLAYTON?
DT=	DT	Document Type	Phrase	S DT=JOURNAL
JN=	JN	Journal Name	Phrase	S JN=NEW SCIENTIST
LA=	LA	Language	Phrase	S LA=ENGLISH
PD=	PD	Publication Date	Phrase	S PD=20000226
PY=	PY	Publication Year	Phrase	S PY=2000
RT=	RT	Record Type	Phrase	S RT=FULLTEXT
SH=	SH	Section Heading ³	Phrase	S SH=FEATURES
SN=	SN	International Standard Serial Number (ISSN)	Phrase	S SN=0262-4079 S SN=02624079
SO=	SO	Source Information ⁴	Word	S SO=(NEW(W)SCIENTIST)
UD=	—	Update	Phrase	S UD=9999
WD=	WD	Word Count	Numeric	S WD>=500

⁴ Search includes Journal Name words, dates, volume, issue, and page numbers. Display includes Journal Name, Volume, Issue, Pagination, and Publication Date.

SPECIAL FEATURES

For command descriptions, enter HELP LIMIT, HELP SORT, HELP RANK, HELP DUP, HELP CURRENT online.

LIMIT	/ENG -- English-Language Records /FULLTEXT -- Full Text /LONG -- Word Count of 1,000 words or more /NONENG -- Non-English Language Records /SHORT -- Word Count of less than 1,000 words /YYYY -- Publication Year	S S1/ENG S S2/FULLTEXT S S6/LONG S S3/NONENG S S5/SHORT S S2/1999:2000
SORT	AU, PD, PY, TI	SORT S1/ALL/TI/D SORT S2/ALL/PY/D
RANK	All phrase- and numeric-indexed fields in the Additional Indexes can be ranked.	RANK AU RANK SH S4
RD, ID	Remove duplicates (RD) or identify duplicates (ID,IDO).	RD S5
CURRENT	Search only the most recent year plus one (CURRENT1) to five (CURRENT5) years.	B 369 CURRENT2

PREDEFINED FORMAT OPTIONS

NO.	DIALOGWEB FORMAT	RECORD CONTENT
1	--	DIALOG Accession Number
2	--	Bibliographic Citation and Indexing
3	Medium	Bibliographic Citation
4	--	Full Record with Tagged Fields
5	Long	Full Record Except Text
6	Short	Title, Publication Date and Word Count
7	--	Full Record except Indexing
8	Free	Title, Indexing, Publication Date and Word Count
9	Full	Full Record
K	--	KWIC (Key Word In Context) displays a window of text; may be used alone or with other formats

OTHER OUTPUT OPTIONS

For an explanation, enter HELP TYPE, HELP UDF, HELP TAG online.

USER DEFINED FORMATS	Display codes listed in the Search Options tables can be used to customize output.	TYPE S4/TI, AU, SH/1-5 PRINT S2/AU, TX/ALL
TAG	Output can be displayed with tags identifying each display field.	TYPE S1/6, TX/ALL TAG PRINT S2/9/1-5 TAG
DIRECT RECORD ACCESS	If the accession number of a specific record is known, it can be used to display the record directly.	TYPE 00085603/9 DISPLAY 00056398/3, TX PRINT 00095905/9

FOR ONLINE HELP:

See HELP FIELDS 369 for searchable fields; HELP FORMAT 369 for output formats; HELP LIMIT 369 for limits; HELP RATES 369 for cost information; HELP SORT 369 for sorts.