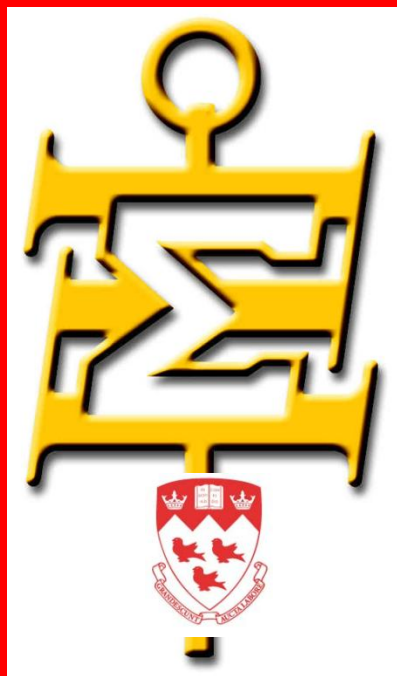


# A Roller Coaster Survey of the History of Sigma Xi, The McGill Chapter And The McGill-Montreal Chapter

**Sigma Xi  
Special Lecture  
and  
Christmas Party  
7.15 Ruttan  
Room**



**Prof.M.A.Whitehead  
Monday, 17 December 2007  
McGill University  
Otto Maass Chemistry,  
Room 10  
6:00 P.M.**

# FOUNDED 1886



Sigma Xi at Cornell University  
by **students** and one Junior  
Faculty member,  
**Frank Van Vleck.**



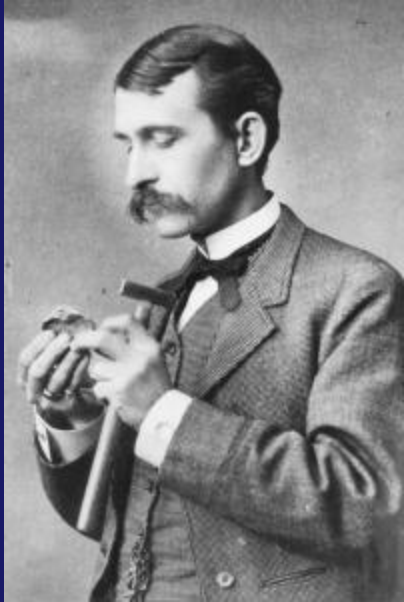
**Sigma Xi Motto**  
**"Companions in Zealous Research,"**  
from Greek words:  
**Σπουδον Ευνονες (Spoudon**  
**Xynones).**

**John H. Van Vleck**  
**1977 Nobel Prize in Physics**



**"Electronic structure of magnetic  
and disordered solids"**

# The 1880s



1891: A palaeontologist and stratigrapher he proved the overlying coal-bearing rocks described from Pennsylvania, were uniquely Pennsylvanian

## *Henry Shaler Williams.*

Examining his favourite fossil brachiopod, *Spirifer laevis*, in the late nineteenth century.

He was the Society's chief mentor and leader at Cornell



1888: Entomologist Anna Botsford Comstock among first five women inducted into Sigma Xi.

Her *Handbook of Nature Study* Published 1911, still in print.

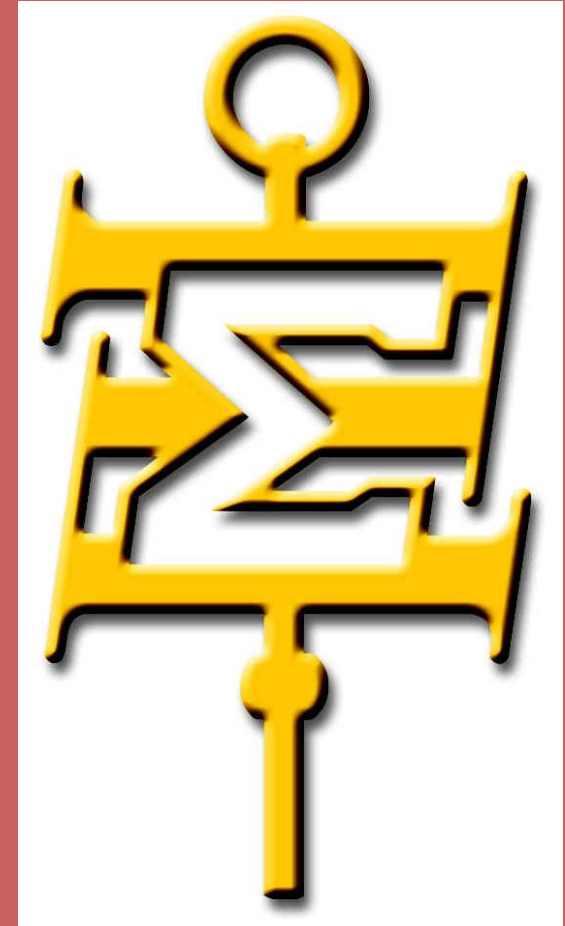
# The 1890s



First Sigma Xi convention held at Cornell University, 1893

## Pledge of the Society

"Do you hereby pledge yourself, in accordance with the purposes and objectives of Sigma Xi, to encourage original investigations in Science, to foster companionship and cooperation among Scientists, to maintain Honour, Integrity and Honesty in all Scientific Activities, and to assume the other continuing Responsibilities of Membership?"



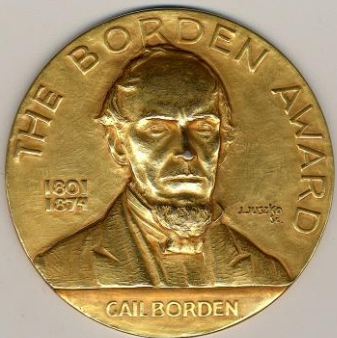
# The 1900s

## Pearl Pauline Swanson



She was the Assistant Director of the Iowa Agriculture and Home Economics Experiment Station (1944-1951) and received:

The Borden Award is the highest recognition for Experimental Research in Foods and Nutrition



# The 1900s

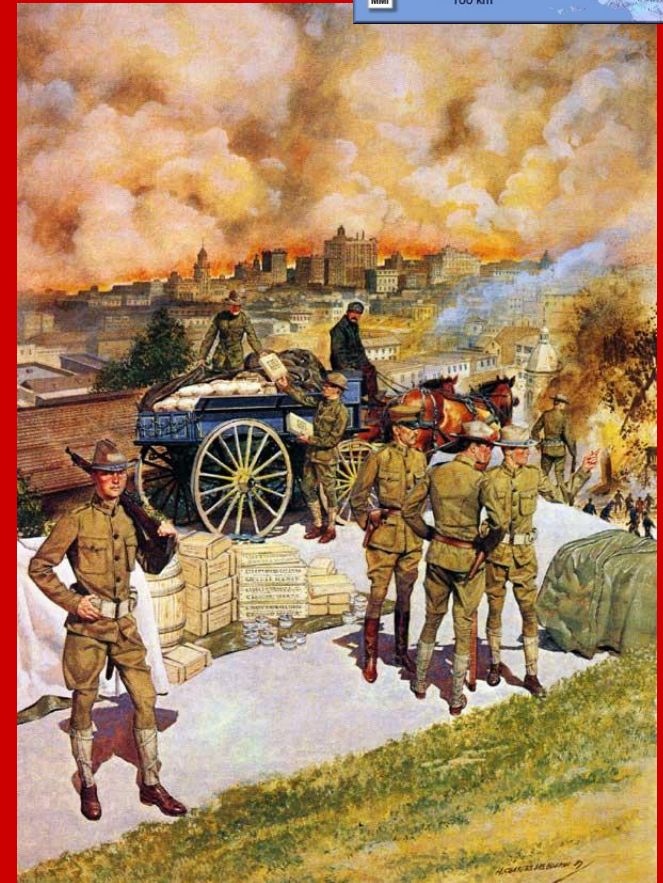
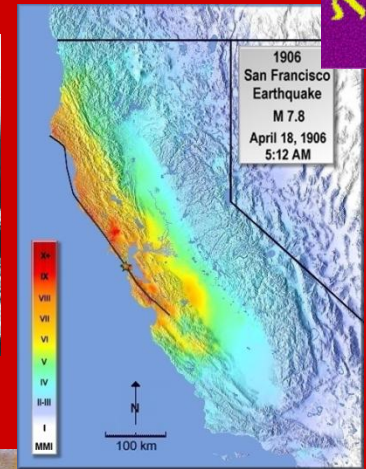
First decade of 20th Century:  
3 Chapters yearly.

Introduced programmes  
beyond Interdisciplinary Scientific debates.

**1906 San Francisco earthquake:  
three Sigma Xi members oversaw  
reconstruction of the Stanford  
University campus.**

a month after President Van Hise lectured on  
“Earth Movements”

Berkeley Chapter led an eradication  
campaign against plague carrying  
spreaders.

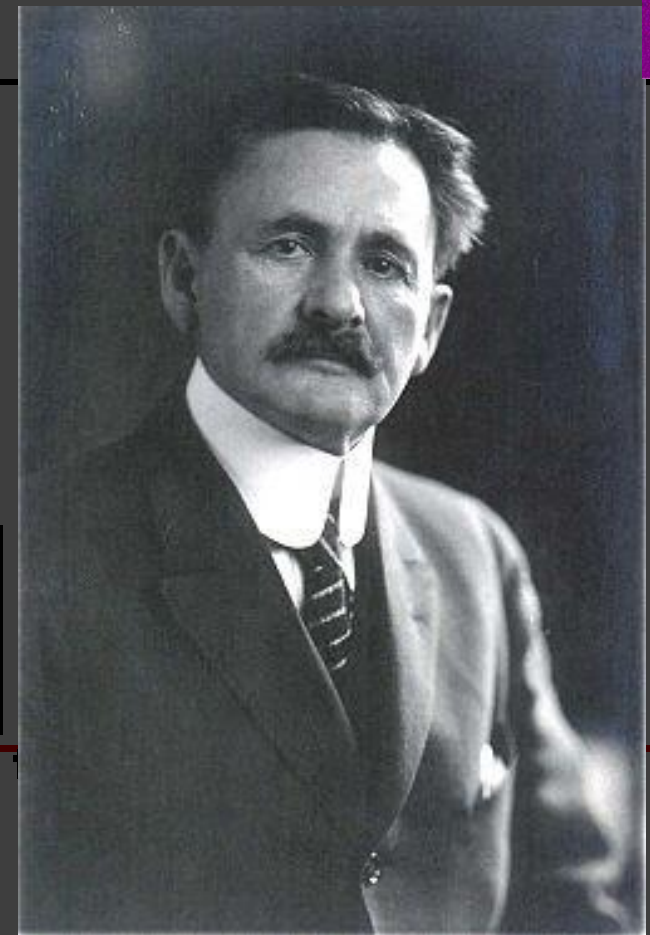
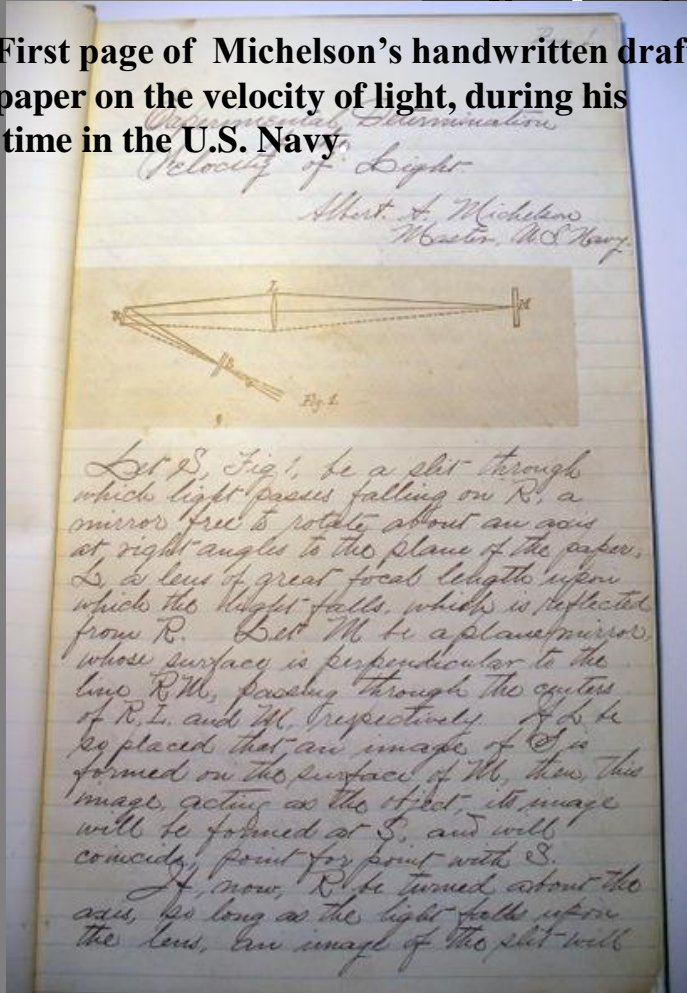


# The 1900s

1907: Albert Michelson

first Sigma Xi member to  
win Nobel Prize in Physics

First page of Michelson's handwritten draft paper on the velocity of light, during his time in the U.S. Navy.



A Prussian-born American physicist

Measured the speed of light

The Michelson-Morley Experiment.

First American to receive

Nobel Prize in Science.

Experiment No.

# The 1900s



At quarter-century in **1911**, Sigma Xi had **2,000 Members in 28 Chapters.**



*Julian Herman Lewis inducted into Sigma Xi in 1913*

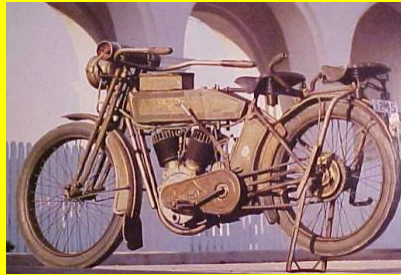
**1915: The first Black to earn a Ph.D. in Physiology: University of Chicago. Expert on immunology. Wrote “*The Biology of the Negro*”, and “*Absorption of substances injected subcutaneously : inhibitory action of heterologous protein mixtures on anaphylaxis*”**



**1916, National Research Council enlisted Sigma Xi's co-operation to organize research facilities for US entry into World War I.**



1913



**Quarterly Bulletin** established to “create further interest in the Society and increase its usefulness.”



**Sigma Xi Quarterly  
1913-1941**



# SIGMA XI QUARTERLY

VOLUME I

MARCH, 1913

NUMBER 1



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### EDITORIAL COMMITTEE:

James McKeen Cattell      Henry Baldwin Ward  
Dayton Clarence Miller      Samuel Wendell Williston

Published by the  
Society of the Sigma Xi

Application Made for Entry as Second-Class Matter at Champaign, Ill., Post Office.  
Annual Subscription 50 Cents      Single Number 15 Cents

# 1921 McGill Centenary

The McGill University Chapter  
Chartered

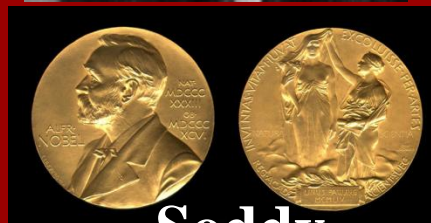
The first Chapter formed  
outside United States.



7  
Ω



The Nobbs and Hyde extension  
to Redpath Library in 1921



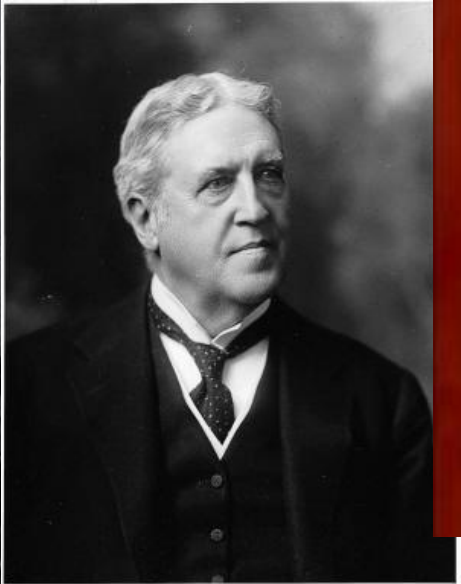
Soddy



McGill University Crest  
designed by P. Nobbs (1922)

# Charter Members of the McGill-Chapter

- Frank Dawson Adams, Geology**
- Edward William Archibald, Surgery**
- Henry Gray Barbour, Pharmacology**
- Cyril Batho, Mathematics**
- Herbert Stanley Birkett, Medicine**
- William M.G. Byers, Ophthalmology**
- Walter William Chipman, Gynecology**
- Jacob Dolid, Chemistry**
- Arthur Stewart Eve, Physics**
- Frederick Gault Finley, Medicine**
- Roger Deland French, Municipal Engineering**
- Joseph Alexander Gray, Physics**
- Francis Charles Harrison, Bacteriology**
- Louis Anthyme Herdt, Electrical Engineering\***
- Frederick M.G. Johnson, Chemistry**
- Louis Vessot King, Physics**
- Francis Ernest Lloyd, Botany**
- Otto Maass, Chemistry**
- Charles Millar McKergow, Mechanical Engineering**
- Archibald Byron Macallum, Biochemistry**
- Henry Martyn Mackay, Civil Engineering**
- Robert Fulford Ruttan, Chemistry**



# The 1920s



In the decade after World War I, Sigma Xi grew rapidly adding 26 new chapters.



**1924:** inducted as an undergraduate, Barbara McClintock was a Sigma Xi member for nearly 60 years before her work was honored with the 1983

**Nobel Prize in Physiology or Medicine**  
for discovery of genetic transposition; the first and only woman to receive an unshared Nobel Prize in that category.



**1921**

**Zoologist Roger Arliner Young the first African American Women to enter the Sciences was inducted into Sigma Xi**

**McGill; Monthly University Wide Lectures: A.N.Whitehead, Bertrand Russell, Appleton, Rutherford, Braggs, Otto Hahn, Fajans, Urey, Haas, Bancroft, Debye, Seigbahn** ,

# The 1920s

**1927:** Grants-in-Aid of Research Programme advanced the Research of Students in Science and Engineering.

**REMEMBER** there were **NO GOVERNMENT GRANTS!**

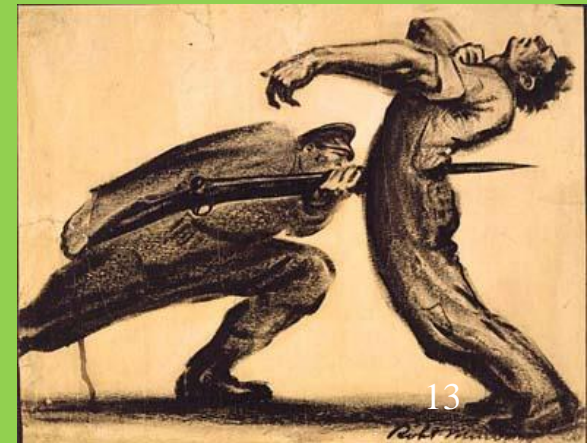
By the end of the decade, Sigma Xi had about **9,000** members.

# The 1930s

**26** Chapters chartered, including Harvard, Princeton and Massachusetts Institute of Technology.



**Great Depression:**  
**Several Chapters instituted Loan Funds for needy Students.**



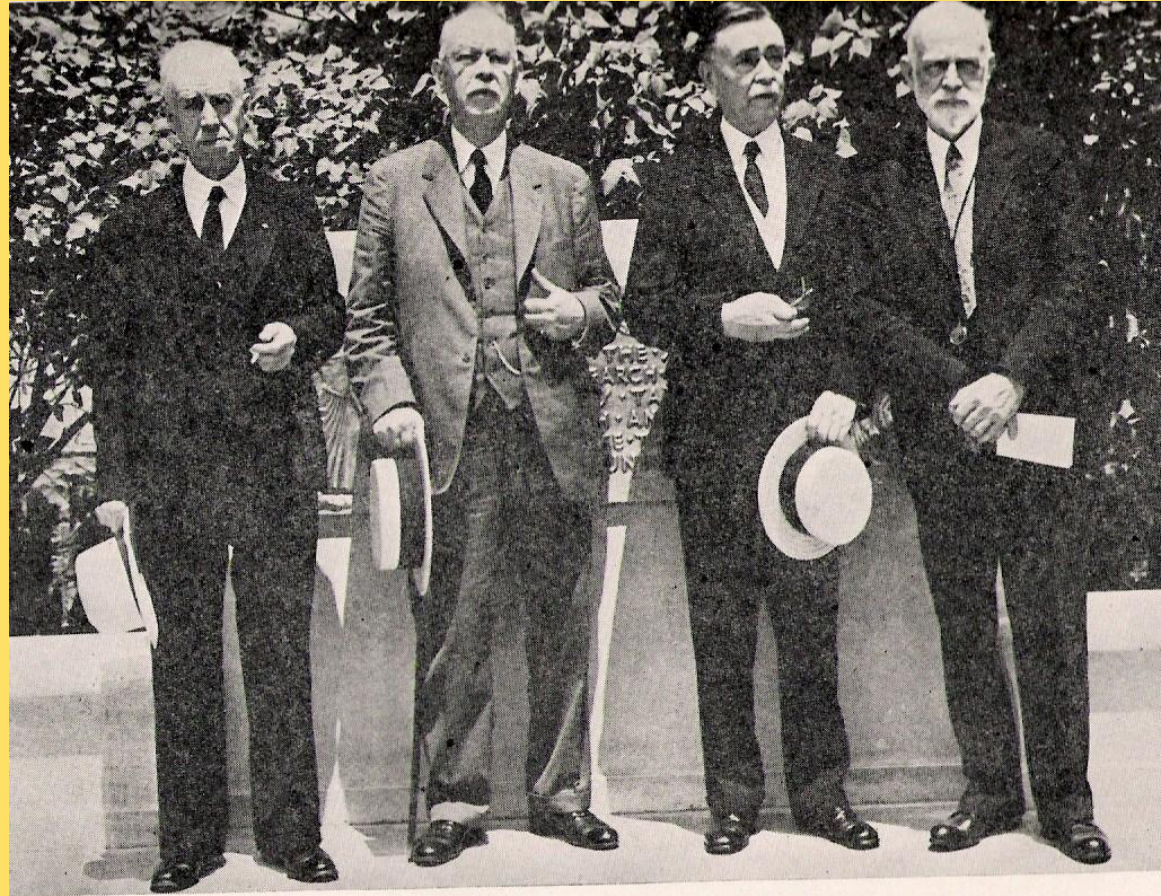
# The 1930s



**Distinguished Lectureship Programme, late 1930s, supported Society's outreach efforts to increase visibility.**

**The Society's 50<sup>th</sup>  
Anniversary  
Celebration  
1936**

**attracted US  
National attention  
through awarding  
Research Prizes in  
Physical and  
Biological Sciences.**



FOUNDERS AND PRESENT PRESIDENT

*Left to right: W. A. Mosscrop, W. A. Day, Frank Van Vleck, President W. F. Durand  
(Photograph taken, Semi-Centennial celebration, Cornell University, June 20, 1936)*

# The 1940s: US and Canadian Government \$

World War II: support for Science brought Sigma Xi to new heights. *American Scientist* authors discussed war-related research problems.

## McGill Sigma Xi:

Diffused lighting and its use in the Chaleur Bay;

**Louis Anthyme Herdt**

Director of Chemical Warfare;

**Otto Maass**

Discovery of compound Z ( $S_2F_6$ );

**Richard Mungen and Templeton Hugell**

Food: Storage anti-rancid agents, toxicity of insecticide DDT;

**W.D. MacFarlane**

Nutritional value of Arctic Food;

**J.G. Armstrong and Alair Lips**

Sea sickness;

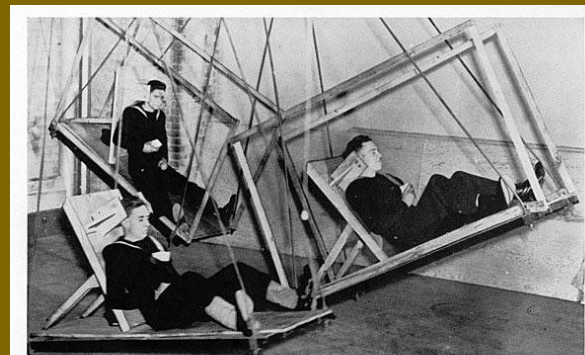
**Dr. R.L. Noble**

Theory of Radar and slotted waveguides:

**H. Watson, F.R. Terroux and J.S. Foster**

RDX: explosive 50xTNT

**James Ross and Robert Schlessler**



THE UNIVERSITY'S RESEARCH IN SEASICKNESS  
Naval ratings, as volunteer assistants, are subjected to the effects of sickness-producing swings.



# E.W.R. Steacie and John Cockcroft

at Université de Montréal developed a

Pile Reactor

Heavy Water Reactor

Atomic Bomb Research



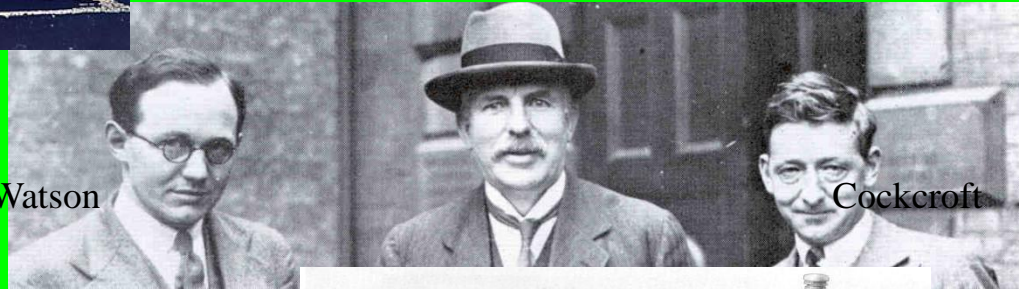
# R.V.V. Nicholls

Plastic Explosives

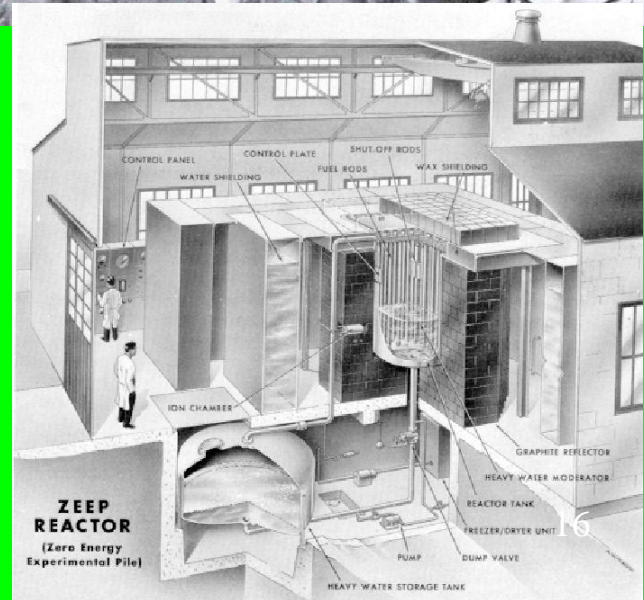
Made better Synthetic rubber and Cheaper DDT



Watson



Cockcroft





# The 1940s

Sigma Xi chartered its  
100th chapter in 1948.

American Scientist:  
Sigma Xi Quarterly – 1942-1945  
American Scientist  
(still digest format and quarterly)  
1946-1969

## McGill:

Foster Radiation Laboratory used  
Cyclotron  
To create a proton beam and study  
radioactive emissions from atomic  
bombardment, microwave emissions,  
and masers



**AMERICAN  
SCIENTIST**



MARCH, 1965

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**1947**

A group of Sigma Xi members formed the Scientific Research Society of America (RESA) to encourage Research in Government and Industrial Laboratories, as Sigma Xi promoted Research in the Academic Community

Husband and wife team, Carl and Gerty Radnitz Cori shared the 1947 Nobel Prize in Physiology or Medicine. Sigma Xi members.



Palestinian  
Refugees 1948

# The 1950s



1950: Sigma Xi proud of 42,000 active members.  
Sigma Xi Highest Honour, the  
**William Procter Prize for Scientific  
Achievement**, awarded to  
Karl Compton.

electronics and spectroscopy passage of photoelectrons through metals,  
ionization, motion of electrons in gases, fluorescence.



## McGill:

Research into Meteorology: Kimble and Hare  
(President Sigma Xi 1986-1987)

Arctic Institute Founded

Bellaire Institute in Barbados opened



# The 1950s

**Hugh S. Taylor at Princeton President in early 1950s became Editor of *American Scientist* in 1955.**

**Executive Secretary Thomas Holme led efforts to make Sigma Xi a truly National Identity i.e USA.**

## McGill:

**Building on McGill  
Research by James Gill  
who discovered Iron  
Ore in Northern Quebec,  
McGill Researchers  
studied glaciology  
and geomorphology**



# The 1960s



**Maria Goeppert Mayer** inducted in first  
50 years of the Society, won the  
1963  
Nobel Prize in Physics.

## McGill: The Pre-Eminent Lectures

**The Glory Days: 450 members**

**Saturday Symposium: POLLUTION: 1500 people**

**UFOs: Little Green Men; 450 people**

**Divining and ESP: 350 people**

**Science and Religion Symposium: 750 people**

**Started “In House Visits”**

**Started: Excursions: EXPO, Air Flights, Chalk River all by Bus, out  
talk Science, back tell ghost stories!**

**FOUNDED 6 CANADIAN CHAPTERS;**

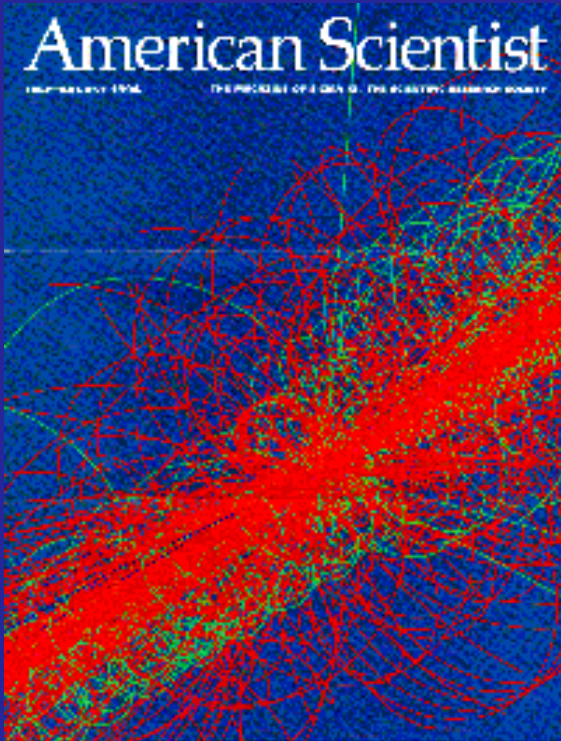
**Avalon, Ottawa, Queens, Vancouver, McMaster, Calgary**

**Remember Departments only had one lecture a month!**

# The 1970s

The Infamous Whitehead report sent from the McGill Chapter and fought through by Dr. Peter Roper at HQ caused numerous changes:

**1) *American Scientist* went from a quarterly to a colourful bimonthly publication in 1970.**



**2) The fight to**

- a) remove National from Lecturers
- b) put US Dollars on subscriptions
- c) form a Canadian Region
- d) rename “American Scientist”

**3) To opt-out of sent US lecturers**

- a) plan our own programmes
- b) receive more of our \$ for local use
- c) pay Membership in local currencies

# The 1970s

HQ moved from Yale to  
New Haven, Connecticut.

Scientific Research Society of America (RESA)  
1947 merged with Sigma Xi in 1974.

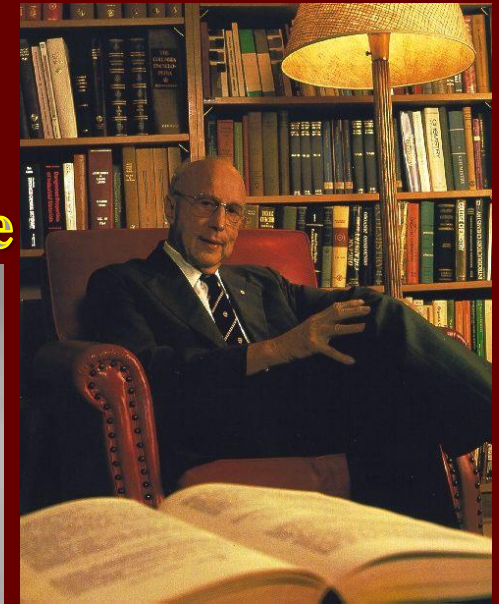
The US National Academy of Sciences contracted with Sigma Xi to administer  
its small-grants Programme through Grants-in-Aid of Research.



## McGill: 1972 Fiftieth Anniversary

“Research is fun. McGill Chapter has been dedicated to this idea for the past 50 years”

Cyclotron dating archaeological artefacts from  
Turkey Greece and Ottawa Valley Leo Yaffe



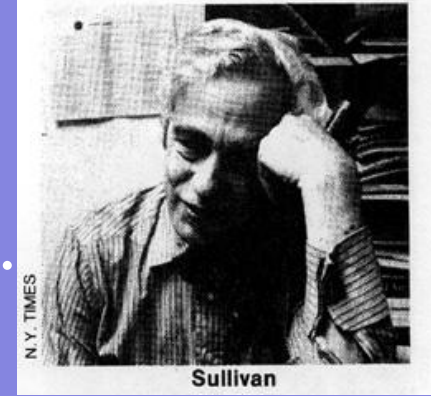
The First Gene Machine  
Constructed:

Kelvin Ogilvie



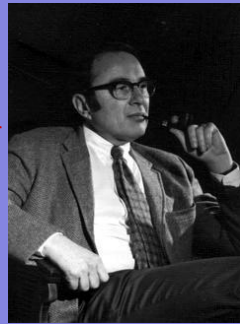
# The 1980s

**1983:** Walter Sullivan of *The New York Times* was the first **Honorary Member** inducted into Sigma Xi.



**1984:** Sigma Xi's ethical guidebook, *Honour in Science*, became required reading in Graduate Research Programmes.

**1984: John P. McGovern Science and Society Medal** was first awarded to Clifford Grobstein.

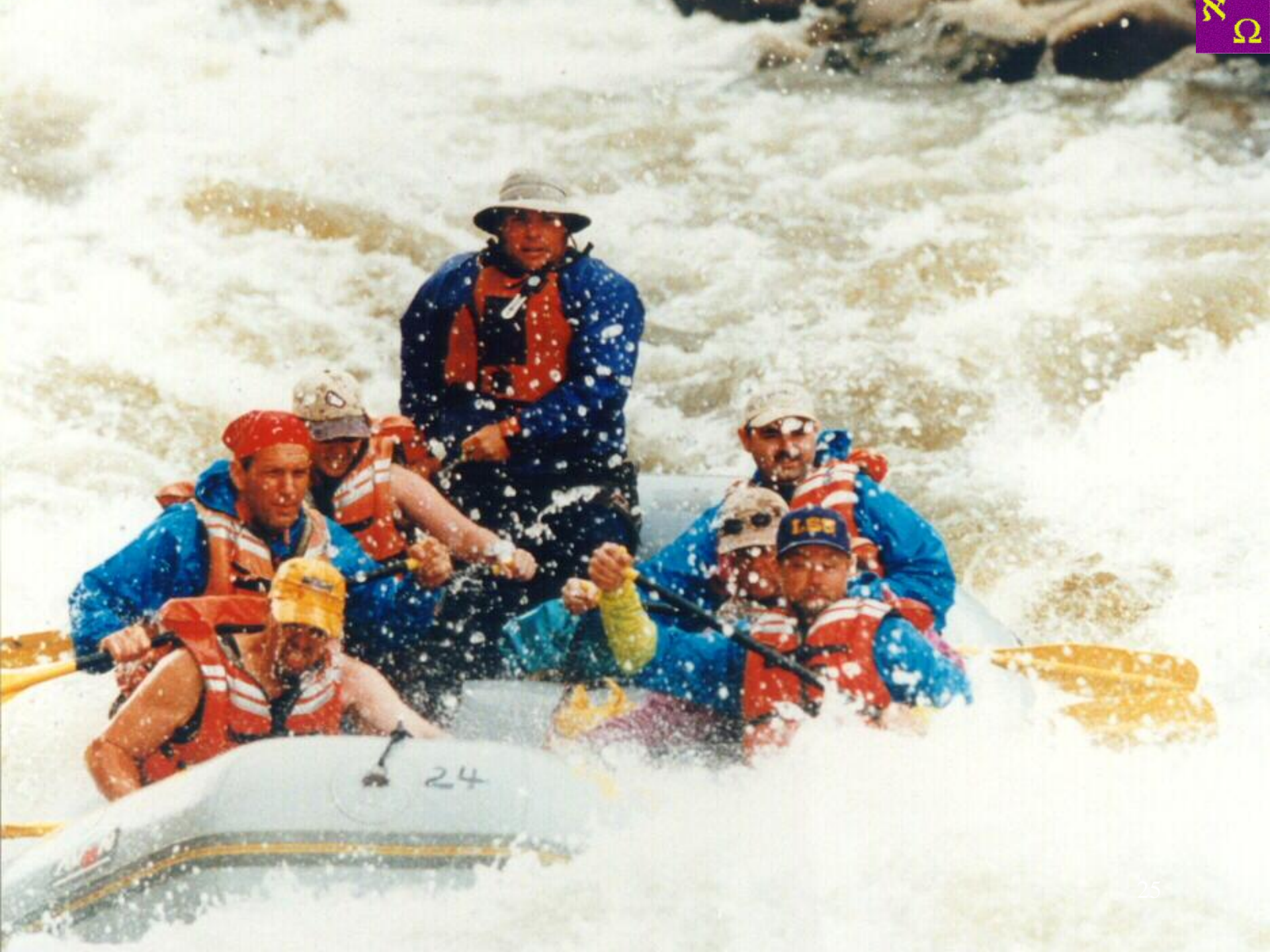


**McGill:** The Secretary and Treasurer, for 25 years, Husband and Wife, Professors, John and Louise Stevenson kept Chapter active and solvent: Trips to James Bay, White River Rafting, Picnics in the snow!



**CHAPTER NEWS**  
**LETTER INAUGURATED**





# The 1980s **FIRST DISASTER**

**Centennial 1986:** With support from the National Science Foundation, Sigma Xi developed

## **“A New Agenda for Science”**

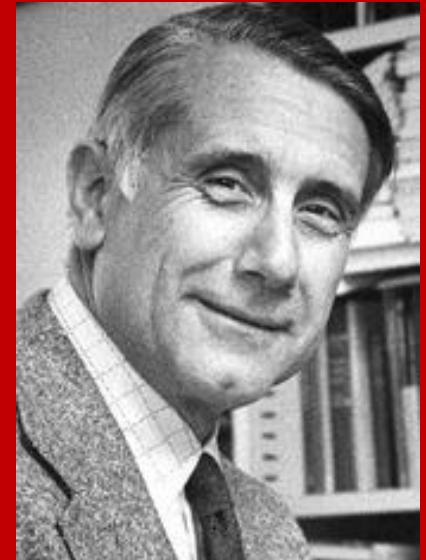
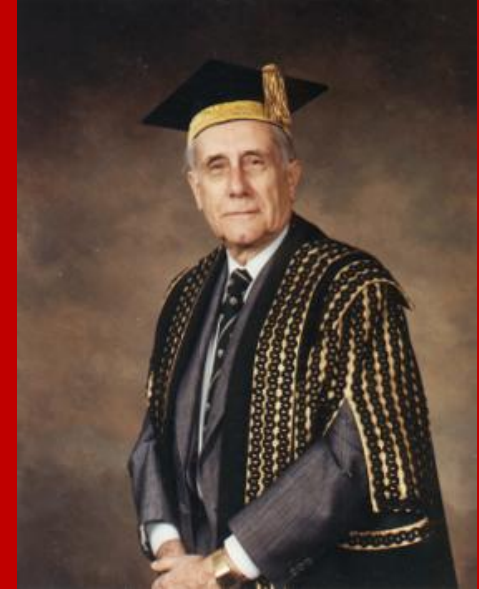
Pro-Active not Honorific

**McGill:**

**Dr Kenneth Hare President Sigma Xi**

**Disapproved: made Society inward looking US oriented. Thoroughly insensitive to Canadian and International Chapter Cultural needs and differences.**

**No change in the Chapter Activities:  
fought at Annual Meetings for a Canadian Region:  
became more self supporting**



# The 1990s: The Second Disaster



**1990 : Membership 125,000**

**Sigma Xi relocated its administrative offices from New Haven, Connecticut, to Research Triangle Park, North Carolina.**

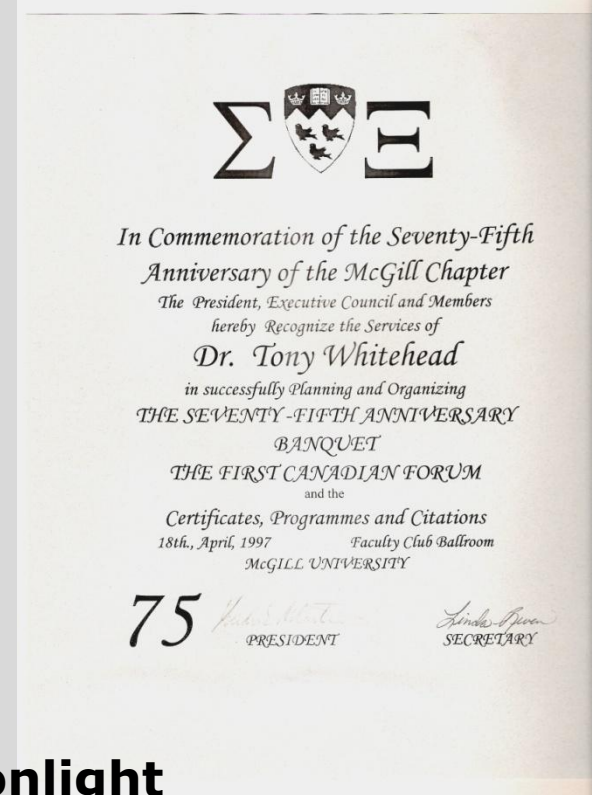
**Sigma Xi combined its Annual Meetings with Forums on Critical Issues at the Intersection of Science and Society.**

**1997: McGill**

**Celebrated its 75<sup>th</sup> Anniversary:  
with the First Canadian Sigma Xi Forum:  
one day on Interdisciplinary Science,  
twenty Scientists paid to attend,  
The Executive Director Peter Blaire  
represented The Society.**

**The Banquet had 75 attendees!**

**Bad Weather! Rain, Hail, Sleet ,Snow, Moonlight**



# Chapter name change in 1997 McGill-Montreal Chapter

**Canadian Interdisciplinary Research Society** on web-page and notices; still on our web-page but comes and goes on the notices!



**McGill - Montréal**  
Chapître **ΣΕ** Chapter  
Sigma Xi : The Canadian Interdisciplinary Research Society  
La Société Canadienne de Recherche Interdisciplinaire

English Home Page      Page d'Accueil en Français

Canadian Interdisciplinary Research Society  
McGill Chapter  
**ΣΕ**

MONDAY, February 16, 1998  
Rm 10, Otto Maass Bld., 6:00 pm

Dr. LOUISE PARADIS  
University of Montreal

"THE OLMEC: A PEOPLE, AN ARTISTIC STYLE,  
A CIVILIZATION"

**ABSTRACT:**

RECENT RESEARCH ON THE OLMEC CULTURE HAS ALLOWED US TO REFINE AND MORE FULLY DOCUMENT OUR UNDERSTANDING OF THE PRE-HISTORIC MESOAMERICAN CIVILIZATION. THE OBJECT OF THIS LECTURE IS TO PRESENT THE RESULTS OF THIS RESEARCH AND TO ANSWER ONE OF THE MANY QUESTIONS POSED BY OLMEC CULTURE:  
HOW IS THE EXPANSION OF OLMEC ART STYLE ACROSS MESOAMERICA EXPLAINED?

TONIGHT

Lecture at 6:00 pm in the Otto Maass Blding, Room 10. Ruttan  
4:30 Council meeting, room 213-215. Room  
5:30 Ruttan Room for the reception proceedings.

For more information: M. A. Whitehead Tel: 398-6239 Fax: 398-3797  
e-mail:tony@maw.chem.mcgill.ca

1998 The only time we cancelled a meeting!



**Ice Storm - January 5-10, 1998**

1998

First Sigma Xi **Young Investigator Award**  
physicist John Gillaspy.

Sigma Xi published  
“**The Responsible Researcher**” covering new  
ethical challenges to research.



McGill Chapter became  
McGill-Montreal Chapter  
The web page in both  
official languages of  
Canada

Annual Banquet followed  
by the Banquet Lecture in  
the Faculty Club ceased  
after 50 years



# 2003



## McGill-Montreal Chapter of Sigma Xi

Occasional Lecture on Science and Religion



### *SEEKING A SILICON SOUL*

**And God Created Robots ...?**

Thursday, November 21st 6:00 p.m.

**Faculty of Education** Room ED129

**Robots, Humans and the Community of Persons**

Friday, November 22nd 6:00 p.m.

**Department of Chemistry,**

Otto Maass Room 10

#### *Seminar*

**Theology and Robots, Q&A**

Friday, November 22nd, 9:30 a.m.

**Faculty of Education** Room ED539

Dr Theol. Anne Foerst is visiting professor for Theology and Computer Science at St. Bonaventure University at Olean, NY, and has been affiliated with the Center for the Studies of Values in Public Life of Harvard Divinity School. She has worked at the Artificial Intelligence Laboratory, Massachusetts Institute of Technology as the theological advisor for the Cog and Kismet Projects, two attempts to develop embodied, autonomous and social robots in analogy to human infants that might learn and develop more mature intelligences. Her work on dialogue has been covered in numerous print and Internet media (MS NBC, Boston Globe, Der Spiegel) and she appeared in many radio and television shows (ABC, CNN, Odysee).

The Canadian Scientific  
and Christian Affiliation



## McGill-Montreal Chapter of Sigma Xi

Occasional Lecture on Science and Religion



*George F.R. Ellis,*

Distinguished Professor,  
University of Cape Town

### *The Cosmos and its Origins:*

The present day universe is of vast size and is very old. Everything we see around us had its origins in the 'Hot Big Bang' expansion of the early universe, which we understand very well. By contrast what occurred before then is not well understood - many options have been proposed, but none have been shown to be correct, and indeed many of these proposals are untestable. Furthermore even the most advanced science is unable to address the issue of 'why' - to resolve the underlying metaphysical reasons for the existence of the cosmos. These issues have to be approached on more general philosophical grounds that take into account wider data than that which is available through strictly scientific investigation - for example the individual events in each of our lives.

This talk will outline our present scientific understanding of the origin and evolution of the universe, and then consider the options and data as regards these metaphysical questions.

**6P.M., Tuesday, February 11<sup>th</sup>, 2003**

**Room 10, Otto Maass Chemistry, McGill University  
(Member's Reception, 5:00 p.m. Ruttan Room)**

The Canadian Scientific  
and Christian Affiliation



# The 2000s



**Sigma Xi DROPPED to 70,000 members**

**500 chapters in US, Canada, Mexico, Russia, Georgia, Switzerland, India and Peking, New Zealand and Australia**

## McGill:

**Jewish Rehabilitation Hospital  
Research Centre March 30, 2001**

**The First Entin Lecture  
September 2005**

**February 26, 2000 Lac St.  
Pierre Trois-Rivieres, Quebec**



**Marie-Victorin parc,  
Kingsey Falls: October 1997**



**Sigma Xi Excellence in  
Undergraduate Research  
June 3rd, 2004**





# The 2000s

Opened December 2003,  
Sigma Xi Centre  
New stage in Society's evolution

Programme Focus 5 key areas:

- 1) Science and Engineering Education,
- 2) Research Ethics,
- 3) Public Understanding of Science,
- 4) International Research Co-operation
- 5) Health of the Research Enterprise.



# Opening and Use: 2003-2007



Coffee break in lounge



Atrium discussions



A Lecture Room



Chain Reaction

# The 2000s Membership at 75,000

The names of nearly 200 members who have won the Nobel Prize are commemorated in the Sigma Xi Centre Hall of Honour.



**Linus Pauling: Chemistry 1954, Peace 1962**

1998 Walter Kohn  
 1998 John Pople  
 1999 Ahmed Zewail *Chemists*  
 2000 Alan Heeger  
 2000 Alan G. MacDiarmid  
 2001 William S. Knowles  
 2002 John B. Fenn  
 2004 Irwin Rose

1998 Louis J. Ignarro  
 1999 Günter Blobel  
 2000 Paul Greengard *Medicine*  
 2002 H. Robert Horvitz  
 2003 Paul C. Lauterbur

2005 Roy J. Glauber  
 2005 John L. Hall  
 2005 Theodor W. Hänsch *Physics*  
 2006 John C. Mather  
 2006 George F. Smoot



# 2004 McGill- Montreal Chapter



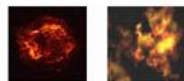
### In Memoriam - Dr. Martin Eatin



The McGill-Montreal Chapter of Sigma Xi recently lost one of its most loyal, erudite, generous and courteous members, Martin Eatin. His good humour, cutting wit, fantastic breadth of knowledge, magnificent command of the English language, words, phrases and rhythms, gave him an old world style and aura which captivated his friends, and colleagues and the Society's members.

### Diversity in Young Neutron Stars

Vikky Kargal  
Physics Department, McGill University  
12<sup>th</sup> September, 2003



### Horving Around

Shela Levary  
MVL, MRCVS, Dipl ACVPA & ECVS  
Professeur, Département de Sciences Cliniques  
Faculté de Médecine Vétérinaire, Université de Montréal  
2<sup>th</sup> October, 2003



### Science, Simulation and Supersupercomputers: The Role of Computers in Aerospace Design

Fred Hestrich  
Research, CTRC Lab, McGill University  
MSE/BCU, Arnold Bombardier Industrial  
Research Chair of Interdisciplinary CTRC  
24<sup>th</sup> November, 2003



### The Search for the Real Ernest Rutherford

John Campbell  
Physics Department, University of Canterbury  
Christchurch, New Zealand  
17<sup>th</sup> December, 2003



### Extending Moore's Law 'Forever': From Microelectronics to Nanoelectronics

Patrick Desjardins  
Canada Research Chair in Condensed  
Matter Physics  
Département de physique  
Troisième Polytechnique de Montréal  
17<sup>th</sup> January, 2004



### Which End is Up? How the Spatial Information of the Body Plan is First Determined in the Egg

Paul Laska  
Department of Biology  
McGill University  
9<sup>th</sup> February, 2004



### The Big Deal about Such Little Things: A Look at Nanoscience

R. Bruce Lennox  
Department of Chemistry, McGill University  
McGill Centre of Physics of Materials  
Protein Engineering Network  
Centre of Excellence  
18<sup>th</sup> March, 2004



### Gallium Nitride: Possibly the most Important Semiconductor since Silicon

Colin Humphreys  
Goldsmith Professor  
of Materials Science  
Cambridge University  
17<sup>th</sup> May, 2004



### Chiral Structures in Trees

Derek Gray  
NSERC Program Chair in Cellulose  
Properties and Structure  
Department of Chemistry,  
McGill University  
27<sup>th</sup> September, 2004



### Science to Support Protection and Recovery of Aquatic Species Under Canada's New Species at Risk Act (SARA)

Howard Fowles  
Species at Risk Specialist  
Department of Fisheries  
and Oceans  
Ottawa, Ontario  
23<sup>rd</sup> October, 2004



Field Trip: Douglas Hospital Brain Bank, 2<sup>nd</sup> April, 2004

The McGill-Montreal Chapter Awards in Interdisciplinary Science Research (2004)

Ernst-Lukas Thoenes & Lisa Szevesky  
"Thinking Outside the Box"

Bell Montreal  
Regional Science & Technology Fair

March 25-27 April 10-12  
1000, Avenue Montclair  
Laval

George Franklin  
"One Fair Thru Them All"

Stacey Ross  
"Maya or Attraction?"

Frederick Soddy  
Nobel Prize in Chemistry 1921

ANNUAL BANQUET

MCCORD MUSEUM

M.A. (Tony) Whitehead  
Professor Emeritus  
Department of Chemistry, McGill University  
University, Canadian and International Cosmobiology  
Group, Sigma Xi  
10<sup>th</sup> April 2004






# Canadian International North Eastern Symposium

11 November 2004



Prof. Lange entertains questions following his lecture on Ionizing Radiations



Discussion among the three morning speakers



2004  
**McGill-Montreal Chapter**  
**Chapitre McGill-Montréal**

**McGord Museum**  
**11th November**

**Canadian International North-Eastern Symposium**  
**Conférence Canadienne Internationale et du Nord-Est**

**Mind and Matter**  
**Esprit et Matière**

**Neutrino Spectroscopy**  
**Spectroscopie Neutrinos**

Chair / Chaire  
 Zack Jacobson

Magnetic Resonance Imaging  
 Imagerie par Résonance Magnétique

Chair / Chaire  
 Chris Lange

**Interdisciplinary Research**  
**Recherche Interdisciplinaire**

Professor M.A.Whitehead, Convenor



From Left to Right: Dr. Christian Cohade, Dr. Christopher Lange, Dr. Raymond Damadian



Coffee Break in the McGord Museum Atrium



Engraved mugs for recipients of the Sigma Xi Fund of Canada Award for Scientific Achievement, to Celebrate the Solar Neutrino Discovery



From Left to Right: Dr. Walter Davidson, Dr. George Ewan, Dr. Arthur MacDonald, Dr. David Sinclair



CINES Volunteers from Left to Right : Florence Quist, Tom Lazzara, Tatiana Vassileff, Adam Czerniewski, M. A. Whitehead, Rami Hourani, Cecile Malaridier-Jugroot, Jonathan Comeau

**Cutting Edge: Real Time**  
**Whole Body NMR:**  
**Birth in real time.**

**The Neutrino:**  
**Experiment**  
**Construction**  
**Measurement**

# Sigma Xi Annual Meeting : Delegates bring Research Posters, Chapter Posters and Graduate Student Posters/Orals



## McGill-Montreal Sigma Xi Chapter

2006-07 Chapter activities

**September 2006**  
**Dr. Carol K. Cohen**  
 Cancer genetics  
 Genetic epidemiology  
 Genetic variation  
 Epidemiology, genetics and heredity of the human brain

**October 2006**  
**Dr. John Lachlan**  
 Genetic epidemiology and the search for the Huntington's gene

**November 2006**  
**Dr. Ronald Neuman**  
 Cell biology  
 The function of the Golgi apparatus in the regulation of protein transport

**December 2006**  
**Dr. Chris Williams**  
 Molecular epidemiology  
 Molecular epidemiology, genetic epidemiology and the search for the Huntington's gene

**January 2007**  
**Dr. Charles B. Macaluso**  
 Developmental biology and evolution  
 Developmental biology and evolution

**February 2007**  
**Dr. Stephen J. Lee**  
 Molecular epidemiology  
 Molecular epidemiology and the search for the Huntington's gene

**March 2007**  
**Dr. Michael R. Smith**  
 Molecular epidemiology  
 Molecular epidemiology and the search for the Huntington's gene

**April 2007**  
**Dr. Nigel Boyle**  
 Cell biology  
 Cell biology and the search for the Huntington's gene

McGill University



# McGill-MONTREAL CHAPTER AWARDS:

**PROGRAMME: 2003**

A series of talks sponsored by the **McGill-Montreal Chapter** linked the brain, the body and the physics behind movement.

**EXCELLENCE: 2003**

The **McGill-Montreal Chapter** took a field trip to the Canadian Space Agency. The trip covered the Canadian innovation: Canadarm2 and other robotic innovations important for space exploration.

**EXCELLENCE :1999**

**McGill University Chapter**– coordinated celebrations of National Chemistry Week, including week-long lecture series to capacity audiences on wide-ranging topics as "Chemistry and Literacy: Scientific Writing in Quebec" and the "Chemistry of Explosives: From Black Powder to Space.

**EXCELLENCE: 2007**

The **McGill-Montreal Chapter** :a guided tour of the Botanical Garden and instituted serving pizza after Sigma Xi lectures to encourage student participation

**RECOGNITION: 2007**

# McGill-Montreal Chapter New Web Page 2006

Chapître



Chapter

# McGill Montréal



welcome

bienvenue



The Canadian Interdisciplinary Research Society  
La Société Canadienne de Recherche Interdisciplinaire



**Dr. Whitehead receiving the McGill-Montreal Chapter Certificate of Excellence  
From President Porter at the Awards Lunch, Orlando, FL. Friday, 2<sup>nd</sup>.November, 2007**



# Sung by a Sextet twice and then by the whole audience standing



## Sigma Xi Song

*Dedicated to the Yale Chapter*

Words by Philip E. Browning

Music from "Aida," by Verdi  
Arranged

Sig - ma Xi, by thy clear call in - vit - ed, We thy sons to

thee our faith have plight-ed; By one aim, one pur-pose high u-

nit - ed, Στου-δών Ξυ-νών, seek-ers for truth are we.

At - om, mole - cule, sine and tan - gent, An - cient

## Sigma Xi Song—Concluded

rock and liv - ing cell, Earth's dark ways, Heav'n's might-y

won - ders, Shall they not na - ture's se - crets tell?

Hold a - loft the lamp of sci-ence burn-ing, By its light may

we the truth dis-cern-ing, Guide man-kind, from path of er - ror

turn - ing, Στου-δών Ξυ-νών, seek-ers for truth are we.

Words by Philip E Browning: Yale Chapter 1887  
**Sigma Xi by thy clear call invited, we thy sons to  
 To thee our Faith have plighted,**



**by one aim, one purpose high united**

**Spoudon Xynones seekers for the truth are we**

**Atom, molecule, sine and tangent, ancient rock and living cell,**

**Earth's dark ways, heav'ns nightly wonders,**

**Shall they not nature's secrets tell?**

**Hold aloft the lamp of science burning**

**By its light may we the truth discerning**

**Guide mankind from path of error turning**

**Spoudon Xynones , seekers of the truth are we.**

