

# NEUROIMAGE

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SEPTEMBRE 2007

NEURORADIOLOGY  
MUHC-MNH

VOLUME 23, NUMBER 2  
SEPTEMBER 2007



## 40 ... LOVE

... the retrospective continues ...

### IN THIS ISSUE ...

“Remembering Dr. Joe Stratford”

*William Feindel*

“Large Colloid Cyst”

*Denis Melançon*

“Tributes to Joan Daphne Broadley”

*Denis Melançon*

In Montreal, during the warm August evenings, Roger Federer and Raphael Nadal were the favourite to win the 2007 Rogers Tennis Cup, but Serbian, Novak Djokovic won the tournament, much to everyone's surprise. With professional tennis, as well as any other professional life; there can be some surprises

Greetings

Amicalement

Saudações

Bäst Hälsningar

此致

Cordialmente

Herzliche Gruesse

O Genki De

Namaste

Afectuosamente

Alsalam alaykum

Respetos

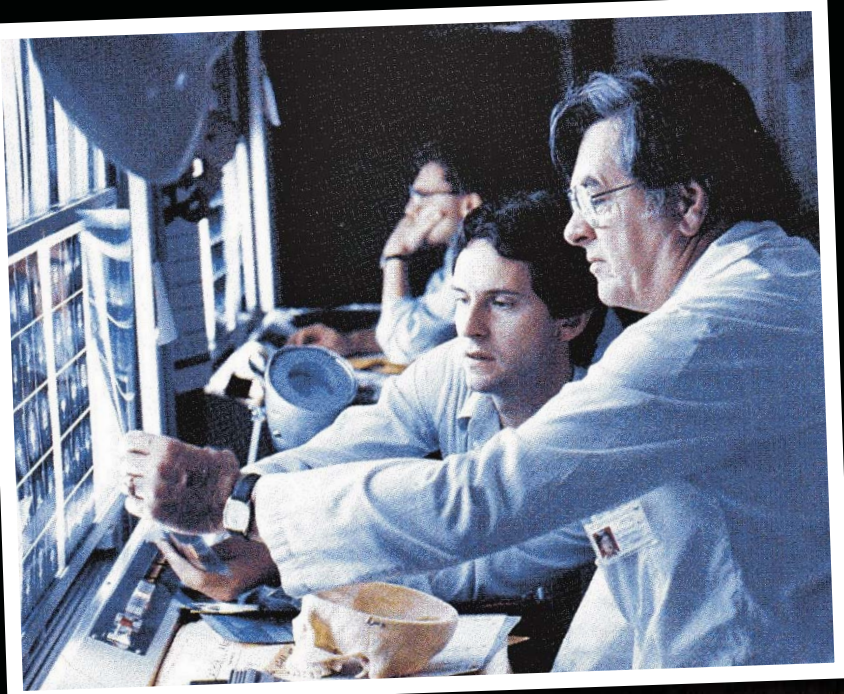
敬意

Saluti affettuosi

# The ball was in my court ... for 40 years

The games of teaching started from training with Dr Don McRae, and then daily practice; they went from “deuce” to “advantage” over the years, with the support of everyone around me. My students learned different techniques, “forehand and backhand”, and also essentials about neuroradiology.

And there were the occasional “volleys” about medicine, about history, about philosophy, about life ...over time some “aces”: But I was always hoping to win the “match point”.



“Experience is a great advantage. The problem is that when you get the experience, you’re too damned old to do anything about it.”

~ Jimmy Connors



Jimmy Connors, U.S. tennis player - He has had 5 U.S. Opens, 2 Wimbledons & one Australian Open; was ranked #1 for 160 straight weeks ('74-'77); 109 career singles titles; 1998 Hall of Fame. He is now the coach of Andy Roddick.

I would like to also invite you to share stories, photos or momentos from the past 40 years, I may need some help with the accuracy of some events. So please keep in touch and visit NeuroImage’s website

<http://neurostudyclub.mcgill.ca>



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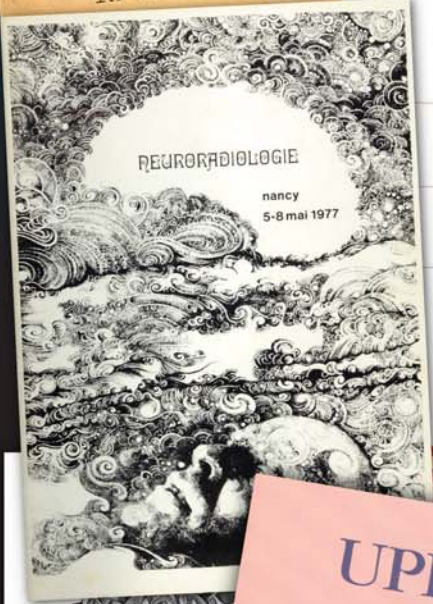
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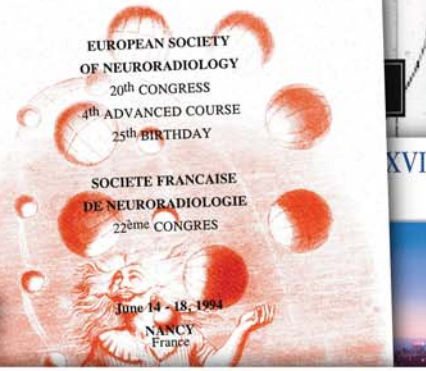
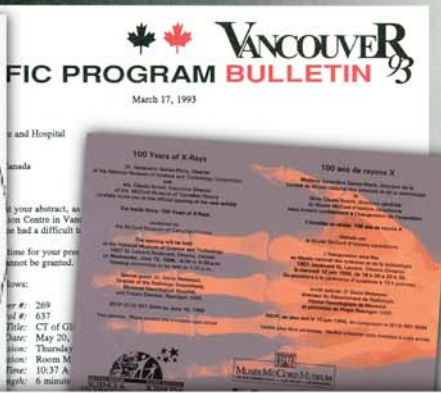
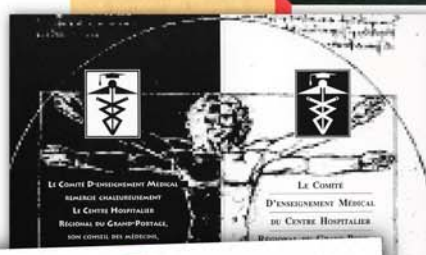
# FIELD TRIPS & SOUVENIRS



Field Trips & Souvenirs by DR. Denis Melançon  
 All those years, in different places, but mainly in Europe,  
 To give some presentations and lectures,  
 But to learn more than to teach,  
 Get together with colleagues & friends,  
 Academically and socially.  
 To renew with former students and fellows,  
 To exchange memories and theories,  
 To see how well they were doing  
 In their professional and private life.



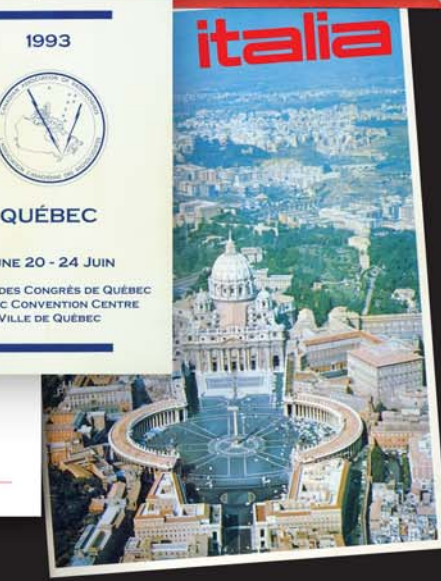
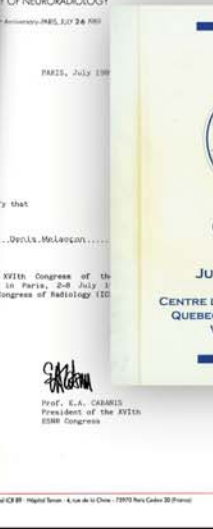
IXON - FRANCE  
 Mars / March / Marzo 25-27 1991  
 II<sup>ème</sup> Congrès de Printemps de la Société Française de Radiologie  
 XIII<sup>ème</sup> Congrès de la Société Française de Neuroradiologie  
 I<sup>a</sup> Riunione comune delle Società Francese ed Italiana di Neuroradiologia  
 II<sup>ème</sup> Congrès Européen de Recherche sur les Produits de Contraste  
 II<sup>a</sup> European Meeting on Contrast Media Research



XVII<sup>th</sup> Symposium Neuroradiologicum  
 Paris - Palais des Congrès - France - August 18-24, 2002



25th Annual Meeting  
 American Society of Neuroradiology  
 New York Hilton  
 May 10 - 15, 1987



1987, New York City, U.S.A

1987, New York City, U.S.A

1988, Uppsala, Sweden

1989, Paris, France

1990, Milano, Italy & 1990, Strasbourg, France

1993, Quebec, Canada

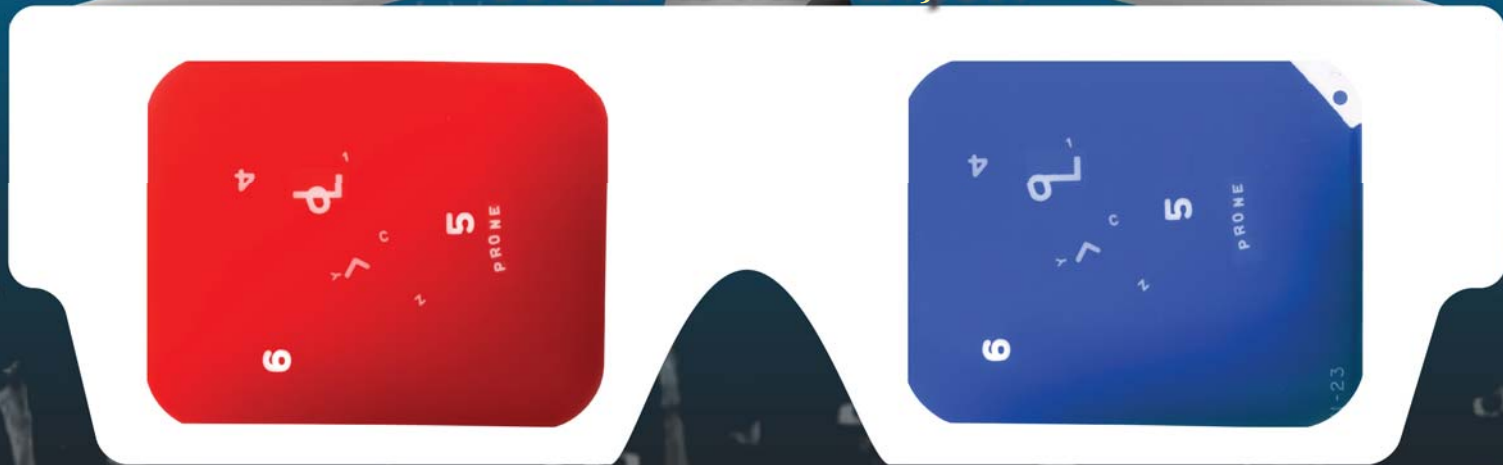
1994, Nancy, France

1996, Montréal, Canada

2002, Paris, France

# LOOK INTO MY EYES: STEREOSCOPY

BY DENIS MELANÇON

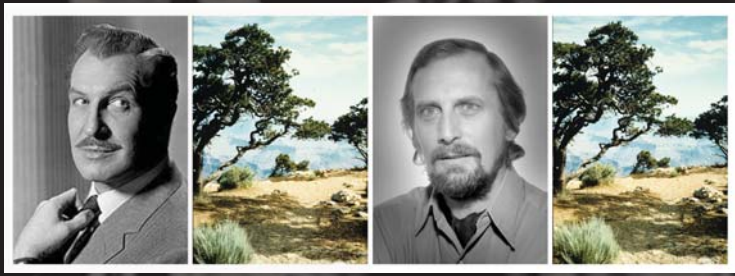


Dr Francis McNaughton at the Wheatstone stereoscope, with an unidentified radiologist, at the Neuro, circa 1950

Most of you remember the attachment of Dr. Romeo Ethier for stereoscopic examinations in Neuroradiology, and his requirement that everyone working with him had tested by Ophthalmology for ability to depth perception, prior to exercising them with and without the Wheatstone stereoscope.

Above is the test he had prepared by x-raying a phone book with metallic items inserted at different levels within it. Not many were successful in identifying the level of all items, obviously he could.

You can try the test. Is number 5 deeper than number 6?



## AN HISTORIC SNAPSHOT OF STEREOSCOPY



1930, Dr. Cornelius Dyke, at the Neurological Institute of New York, uses stereoscopic views of the skull as a base for a publication



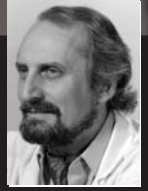
1938, Sir Charles Wheatstone describes in a paper, the stereoscopic views of the Royal Society



1951, following the death of Donald McEachern, Francis McNaughton took over as neurologist in chief and neurologist to the Royal Victoria Hospital.



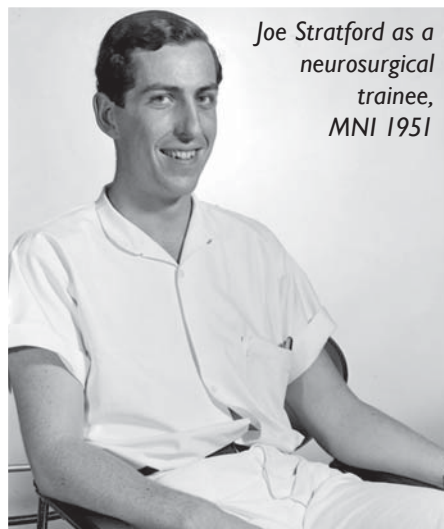
1952, "Bwana Devil" is coined the first 3D Movie, but in fact that title should have went to the movie "The Power of Love" back in 1922



1960, Dr Romeo Ethier, started uses the above stereoscopic images to test his residents

# AN APPRECIATION OF JOSEPH STRATFORD (1923-2007): TEACHER, NEUROSURGEON, HUMANIST

BY DR. WILLIAM FEINDEL, OC, MDCM, FRCSC., PROFESSOR OF NEUROSURGERY,  
DIRECTOR EMERITUS MONTREAL NEUROLOGICAL INSTITUTE & HOSPITAL, HONOURARY OSLER LIBRARIAN,  
MCGILL UNIVERSITY



Joe Stratford as a  
neurosurgical  
trainee,  
MNI 1951

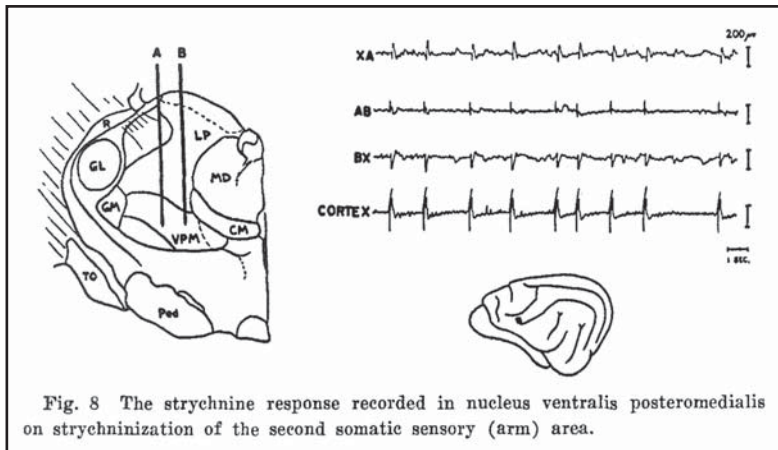
Joseph Stratford was born in Brantford, Ontario on September 5th, 1923. We received news of his death in the Centre Hospitalier du Val d'Ariège on July 22nd, just six weeks short of his 84th birthday. He had been visiting his daughter Leslie and her husband John Laury in this pleasant corner of France, between Toulouse and the Pyrenees, where the aura of the Cathars still lingers.

Joe Stratford was highly regarded by his peers in neurology and neurosurgery for his talents as a teacher and organizer and his character as a fine gentleman. I write as a friend who had much in common with him – medical school at McGill, clinical residency and laboratory research at the MNI, a stint overseas at Queen Square, partners for three years at University Hospital, Saskatoon and from the early 1960s working together at the McGill Hospitals – over sixty years of close collegiality and family friendship.

Joe Stratford graduated BSc, (1945), MDCM (1947) and MSc, (1951) and Diploma in Neurosurgery (1954). We first came to know each other through the McGill Osler Society, each of us holding the presidency in the successive years 1945 and 1946, and through our common admiration of Dr. William Francis, the incomparable Osler Librarian. On July 12th, 1949 to celebrate the centenary of Sir William Osler's birth, Joe and I teamed up with Sean Murphy, another president of the Osler Society and John Bates, president of the medical undergraduate society, to arrange a dinner at the NΣN fraternity on University Street. As Oslerian aficionados will know, William Osler from his Montreal days had an alter ego whom he named Egerton Yorrick Davis, under whose name he submitted several risqué articles to Canadian medical journals. Dr. Davis was alleged to have been a retired US military surgeon living in Caughnawaga so we went to some trouble to mail the invitations for this dinner postmarked from Caughnawaga to the members of the faculty. At the dinner, Dean Charles Martin and Dr. Francis talked about Osler and Wilder Penfield proposed the toast to Sir William. In the midst of the dinner Sean Murphy showed up as an Indian chief with full feathered head dress, stripped to the waist, with a generous coating of man-tan and was introduced by us to the distinguished faculty members as a distant relative of E.Y. Davis. This elaborate joke – so we thought – fell quite flat.



Program of the Osler Centennial Dinner, 1949



After an internship at the Montreal General Hospital on Dorchester Street, Joe carried out research in the 7<sup>th</sup> floor neurophysiological laboratory of the MNI and submitted an MSc thesis on “A study of certain corticothalamic relationships” which was later published in the *Journal of Comparative Neurology* of 1954. He used the technique of triggering neurons in the sensory cortex by strychnine, to fire down to thalamic neurons. (See figure to the left). He obtained novel evidence that offset the conventional view that the thalamus served exclusively as a relay station for afferent sensory input from the brainstem to the cortex.

MNI Staff, 1954



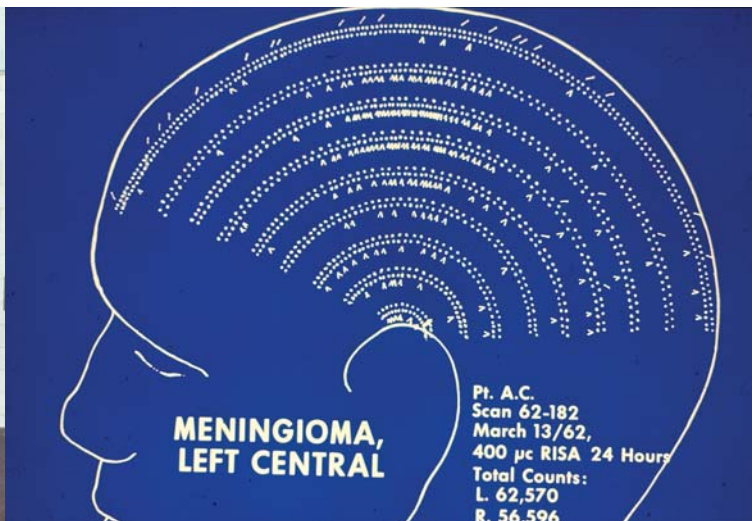
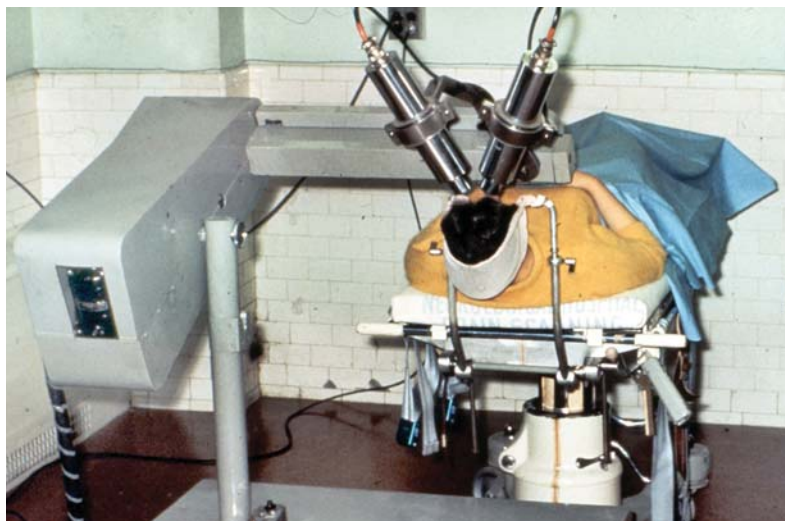
On a Province of Quebec postgraduate fellowship, Joe spent a year in London, England, first at the National Hospital, Queen Square and then as house surgeon at the British postgraduate medical school, Hammersmith. In a letter of the 15th of July, 1950 to Wilder Penfield, Joe wrote, “Queen Square is certainly a tight little circle in London, and England for that matter.” He noted, “the attitude and opinion held by all (almost all) of the staff, junior and senior, of the superiority of their own Queen Square”. He referred in thumbnail sketches to the “dogmatic eloquence of Walshe, the flowery smoothness of Macdonald Critchley, the dry dullness of Purdon Martin and the solid knowledge of Sir Charles Symonds” – views of these famous neurological teachers that many overseas graduate students might share.

During the years 1951 through 1954, he completed his residency in neurosurgery under the tutelage of William Cone on the neurosurgical service and as senior fellow in neuropathology, then as senior resident on Wilder Penfield’s service. Following his residency he was appointed a clinical assistant



*Neuropathology Laboratory, MNI, 1953*  
 (From left to right: Wilder Penfield, Joe Stratford, Lamarr Roberts, John Roth, Bill Feindel, Seated at the microscope, William Cone)

in neurosurgery at the Montreal Neurological Institute, a fellow in neurosurgery at the Montreal General Hospital and a junior consultant in neurosurgery at the Queen Mary Veteran's Hospital as well as a lecturer in neurosurgery at McGill University. He became a certified specialist in neurosurgery of the Quebec College of Physicians and Surgeons and a Fellow of the Royal College of Surgeons of Canada.



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JOURNAL OF THE CANADIAN ASSOCIATION OF RADIOLOGISTS

Cowan et al: Localization of Intracranial Lesions

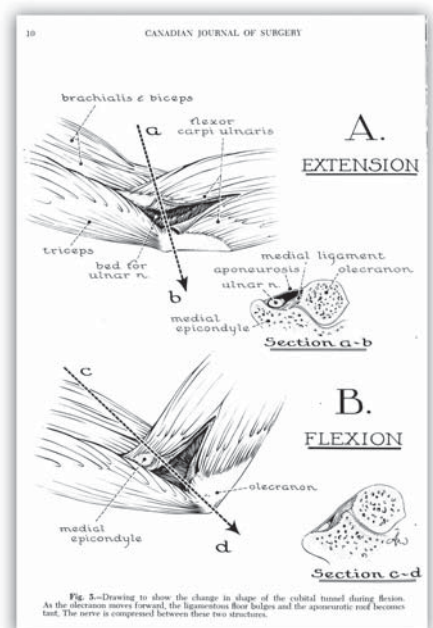
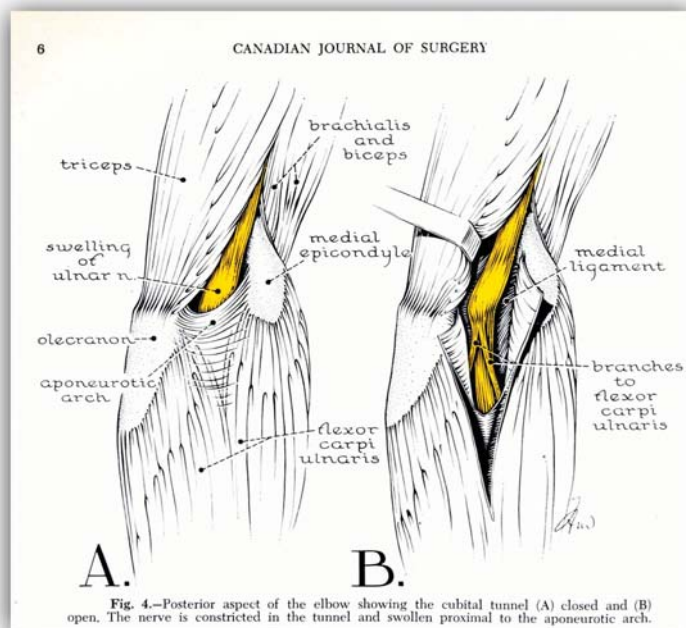
## LOCALIZATION OF INTRACRANIAL LESIONS USING RADIOACTIVE IODINATED HUMAN SERUM ALBUMIN AND AN AUTOMATIC SCANNER

GEORGE A. B. COWAN, M.B., Ch.B.  
SYLVIA O. FEDORUK, M.A.  
WILLIAM H. FEINDEL, M.D.<sup>1</sup>  
JOSEPH G. STRATFORD, M.D.

Saskatoon Cancer Clinic and Departments of Therapeutic Radiology and Neurosurgery,  
University of Saskatchewan, Saskatchewan.

In 1956 Joe Stratford and more critically his wife Aurelie (who had been secretary to Wilder Penfield in his neurosurgical office) were persuaded to join us at the University Hospital in Saskatoon where he became an Associate Professor of surgery. The opportunities in Saskatoon seemed unlimited – the school was expanding from a two-year preclinical course to a full four-year course; the Saskatchewan government headed by Tommy Douglas had finally completed a splendid new hospital on the university campus; Wendell McLeod (McGill MDCM) a vigorous and enthusiastic dean, had recruited a score of medical academics from other centers to join this exciting venture.

During the next four years at University Hospital, with the collaboration of Harold Johns, Sylvia Fedoruk and their team of physicists at the Saskatoon Cancer Clinic, we introduced the Saskatoon contour automatic neuroisotope scanner (SCANS); this later became the grandfather of our pioneer PET system at the MNI. We also carried over from the MNI early work on hypothermia during craniotomy for vascular lesions and started experimental work on that subject – a suitable topic for the cold prairie winters. In addition, as a result of our successful experiences with three patients who had ulnar nerve palsy, we introduced a simple operation to decompress the ulnar nerve in what we coined the “cubital tunnel”. The procedure was clearly depicted by the expert drawings of the medical artist Helen MacArthur. (Please see 3 top figures on the next page). This corrective surgical procedure became widely adopted in other surgical centers as an option to the more complicated (and often unnecessary) anterior transposition of the nerve. (Today on the Google site, “Cubital tunnel” brings up 142,000 results)



By 1958 we had been joined by Donald Baxter in neurology, George Olszewski in neuropathology and continued to enjoy the expertise of Sidney Traub in neuroradiology, as well as the experienced neurological support of Allan Bailey – a satellite MNI on the prairies.

Joe Stratford succeeded me in 1959 as Chief of the Department of Neurosurgery at Saskatoon when I returned to take over the William Cone Chair in Neurosurgery at the MNI. He became Professor of Surgery and was elected Honorary President of the Student Medical Society at the University of Saskatchewan.

In 1962, largely through the persuasive powers of Rocke Robertson, then Chairman of Surgery at McGill, Joe returned to become Neurosurgeon-in-Chief and Director of the Division of Neurosurgery at the Montreal General Hospital. Over the next forty years he dedicated himself to building up an excellent general neurosurgical service, recognized by the residents as a key learning appointment in their program. He cooperated closely with Donald Baxter to build up neurology and neurosurgical divisions which became widely recognized for quality of care and academic input into neurosciences research. How this combined unit developed as the Montreal General has been well told by Donald Baxter and Joe Stratford in their article “Neurology and Neurosurgery at the Montreal General Hospital 1960-1980” (Can J Neurol Sci 2000;27:79-83).

Joe Stratford’s special interests over the years were directed to the use of hypothermia in neurosurgery, problems of spinal cord surgery and arterial injection of radioisotopes for brain scanning. In the mid 1970s with his colleagues he established a multidisciplinary pain center at the Montreal General Hospital, recruiting Ronald Melzack and others to provide relief for patients with difficult pain problems. He gave generously of his time and effort to the Victorian Order of Nurses as a member of the Board of Directors. He served on a number of committees at McGill University and on the Senate as representative of the Faculty of Medicine. In 1974, he was elected president of the Canadian Neurosurgical Society



Joe Stratford’s ardent and pervading passion for painting and literature gave him a broad humanist viewpoint. He took a keen interest in his collection of Canadian art and in selected works of early 20th Century English authors. At their country home, their cows came to be whimsically called after the Bloomsbury Group – so they were named Virginia, Victoria, Vanessa et al. Joe’s elegantly legible handscript was a delight for the nursing and secretarial staff. He will be remembered also by his medical colleagues for his deep concern for patients and by his many friends for his unruffled charm – reflecting Osler’s “Aequanimitas”.



# LARGE COLLOID CYST INTO A LARGE CAVUM SEPTUM PELLUCIDUM

BY DR. DENIS MELANÇON

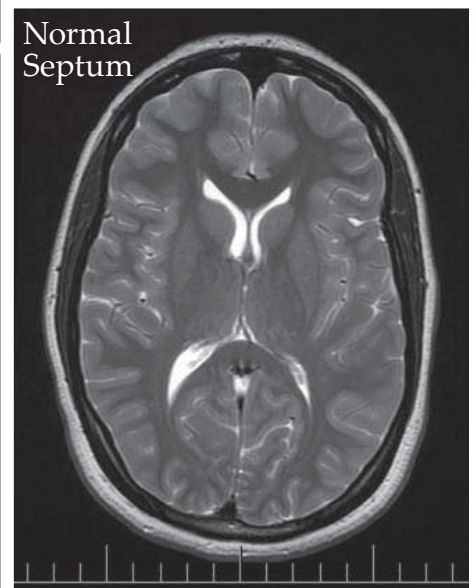
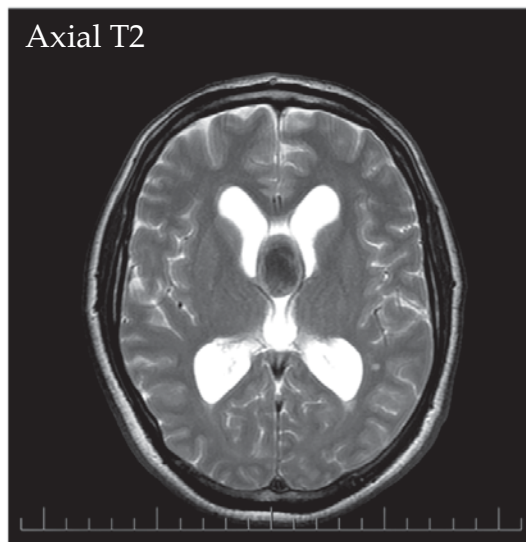
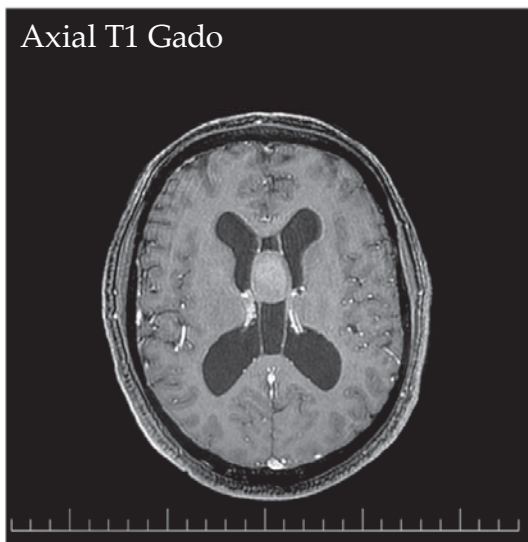
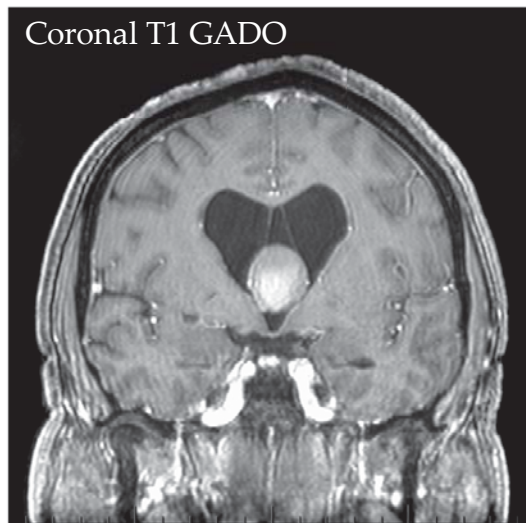
**T**he etiology of colloid cysts remains a source of debate. For more than 50 years however, they were called paraphysal cysts (Sjovall 1910), as remnants of the paraphysis, an embryonic midline structure within the diencephalic roof, immediately rostral to the telencephalic border (foramen of Monro) The cells of the paraphysis are similar to those found in colloid cysts (columnar epithelial cells). Several reports written more recently about colloid cysts in other locations have questioned the paraphysal origin: diencephalic ependyma, neuroepithelium and epithelium of endodermal origin have been postulated. The endodermal origin seems to me the most probable origin, I would not consider ependymal cyst nor neuroepithelial cyst.

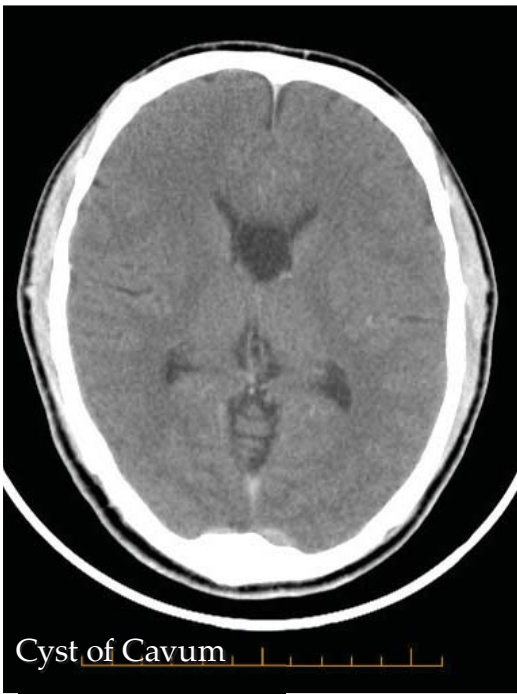
The large colloid cyst shown here can extend forward and upward that much, because it can insert itself in between the two leaves of the septum. At the same time, it shows how and where the cavum communicates with the ventricular system.

The septum pellucidum is made up of two thin sheets of mostly glial-like elements that abut each other in the midline and have a potential space between them. At the base of the sheets rostrally are

the septal nuclei, which are important components of the limbic system.

There is still debate as to the origin of the fluid created in between those two sheets, whether communication with the lateral ventricles or autogenous secretion.





CONGENITAL CEREBRAL CYSTS OF THE CAVUM SEPTI  
PELLUCIDI (FIFTH VENTRICLE) AND CAVUM  
VERGAE (SIXTH VENTRICLE)

DIAGNOSIS AND TREATMENT \*

WALTER E. DANDY, M.D.

BALTIMORE

*Written circa 1930*

It is well recognized that the cavum is not from the original neural canal like the developing cerebral vesicles of the forebrain.

However, the communication with the ventricular system has been well established in the past on pneumoencephalography. And well described in the late 1920's by Walter Dandy.

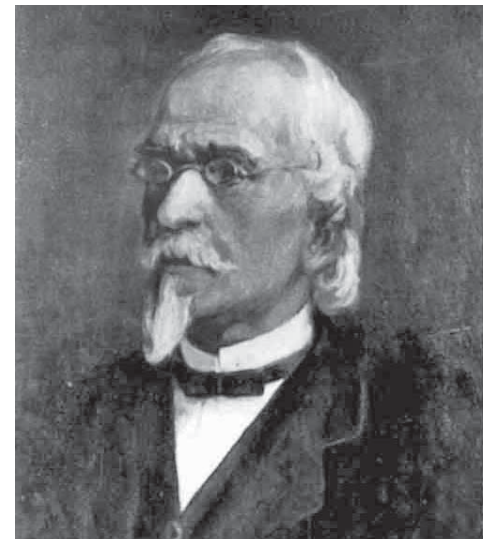


*When long, the septum stretches the hippocampal commissure and creates the space described by Verga*

## Andrea Verga

*Treviglio(Bergamo) 1811- Milano 1895*

Anatomico di discreta reputazione (il suo nome resta legato al “ventricolo di Verga”), si dedicò agli studi psichiatrici. Diviene quindi direttore del manicomio milanese della Senavra e dell’Ospedale Maggiore di Milano, dove, a partire dal 1865, insegnò “Clinica delle malattie mentali”. Nel 1852 dette vita alla prima rivista specializzata “L’Appendice psichiatrica” della “Gazzetta medica italiana”. Nel 1864 fondò, insieme a Cesare Castiglioni e Serafino Biffi, l’“Archivio Italiano per le malattie nervose e più particolarmente per le alienazioni mentali”. Tra le sue opere: Studi anatomici sul cranio e sull’encefalo. Psicologici e frenatrici, Milano, Manini-Wiget, 1896-97. Fu nominato senatore nel 1897.





# JOAN DAPHNE BROADLEY

A few words, of you,  
A few words, for you,  
A few words, to you.

You were our chief-technician for many years,  
We, radiologists of those years, the sixties and seventies,  
Don McRae, Romeo Ethier, Jean Vezina, Michael Molot  
Gary Belanger, Saul Taylor, Jacques Théron and myself.  
Also we, technologists and clerical staff of those days.

You were a highly competent technologist

You were proud of your profession,

And, you had the concern for the patient;

You wanted your staff to share with you  
the same competence, the same concern, the same pride.

You succeeded, in all aspects.

You had many other talents,

you were knowledgeable in many fields,

you enjoyed many pastimes, in nature and of culture,

but your main endeavour was the success of your technologists

and the success of the department of Radiology.

The department was called "a family", in a way... yours,

Many of us remember those days of success and satisfaction.

These were my few words, to you, Joan,  
Take them with you & keep them...forever...

Denis Melançon

Joan was born in 1926 just south of London in Carshalton. Her father had served in the trenches during the Great War and her mother had been a professional singer. ...

She completed her training to be an x-ray technician in London. Upon graduating at age 18, she worked with renown doctors in their prestigious Harley Street offices...

In the mid- to late 1950's, after traveling back and forth a few times, Joan emigrated to Canada. She first went to Toronto before settling in Montreal. She began in the rank of radiology technicians working for a few years at the Reddy Hospital, then switched to the Montreal Neurological Institute where she made rapid progress and soon became the chief radiology technician. Joan was also served as the chief x-ray technician for the Montreal Canadians: she had ring side seats for all the games and once x-rayed Jean Beliveau!

Her concern for others also prompted her undertaking the responsibility of serving as president of the Quebec Radiology Technician's Society. ...

She was instrumental in the Neurological Institute becoming the first hospital in Canada to acquire a CT scanner.....

Reviewing Joan's life we discover three particular leitmotif; we discover that she found a time for work, a time for music and a time for travel...

And yes, there is a time to be born and a time to die. There is a time to remember and a time to let go, a time to give thanks, and a time to live out the love that has been granted to us... Amen.

Words abstracted from  
Rev. Jan Jorgensen's eulogy,  
June 21st, 2007

