

The Newsletter of the Radiology History & Heritage Charitable Trust

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Editorial Notes

The newly improved and enlarged web site of the Radiology History and Heritage Charitable Trust is now online and working. Material is gradually being added. The address is now www.rhct.org.uk. Do visit the site. I would be interested in any comments.

I hope you enjoy this newsletter. I hope to produce the next in the autumn. Please contact me if you have any material that might be included.

Radiology 1999

The RHHCT will be having a stand at Birmingham in the National Indoor Arena during Radiology 1999 (17th-19th May 1999).

One again there will be a sale of old books to raise money for the work of the Trust. The books available to buy are listed at the end of this newsletter.

I will be putting on an exhibition with Dr Uwe Busch of the Deutsches Röntgen-Museum at the RHHCT stand of a series of 45 letters from British scientists to Professor Röntgen. These are most interesting and well worth a visit.

If you are in Birmingham for the meeting do come and see us.

The Radiological History session is on Tuesday 18th May in the Olympian Suite with presentations on the history of radiotherapy and contrast media.

The Wellcome Trust: A Healthy Heritage Symposium (25th – 26th February 1999)

I had an enjoyable couple of days at the Wellcome Trust in Euston Road for this symposium. My hospital trust even accepted it as study leave. The whole question of what to collect and what not to collect was a recurring theme of the meeting. We can of course never get it right. As David Pearson said in his introduction: we “cannot make assumptions of research priorities of future generations. Posterity will complain whatever we will do for it”.

The problem of the present is the sheer volume of material. Bruce Madge from the British Library gave an interesting talk. In spite of the growth of computers and electronic media, the last 10 years has witnessed a 65% increase in the use of paper. The British Library adds 8 miles of printed material each year. There is an exponential curve of increase of medical journals, the numbers of titles doubling every 18 years. This is combined with the development of new electronic media and the Internet. There are major problems with the electronic archive and particularly who will be responsible for keeping it.

Julia Sheppard from the Contemporary Medical Archives Centre at the Wellcome Trust looked at the archiving of medical activity. It is difficult to define a contemporary record: it extends into the past and includes many different areas. Medical material is kept in many varied locations with differing acquisition policies. There is a need for documentation policies and a proactive approach in specific areas. With a huge amount of material dispersed in many different sites and with resource constraints we have to look at solutions. The following were suggested:

- Guidance and education.
- Clear collection policies.
- Clarification of the needs of historians and proof of usage.
- Surveys.
- The material needs to be catalogued. This has financial implications.
- Use of existing expertise.
- Communication. Involve an archivist in the collection of material.

Till Tansey from the Wellcome Institute gave the historian's perspective, which was again related to the recurring theme of the plethora of material. Till produced a new word to me: bibliochlothanasia, meaning overcrowding by books.

A J P Taylor: "history gets thicker as we approach recent times".

Historical material survives by four processes:

Darwinian: Survival of the fittest (bias towards the great and the good).

Eugenic: Positive selection of material by individuals and organisations.

Opportunistic: coming across material at an interview etc.

Carcinogenic: Uncontrolled proliferation of records. Historians drowning in a sea of irrelevant records.

There therefore needs to be a process of programmed record removal (apoptosis) since everything cannot be kept

Till suggested that we need to create new records:

- Autobiographies
- Reminiscences
- Oral History Records

"The dustbin of history is a useful tool to use"

The meeting was very relevant to the aims of the RHHCT. We need to be considering what needs to be kept to document the history of radiology, who should keep it and where it should be kept. It is of concern that there is no national archive for X-ray film and records of examinations. In a few years time with ever-increasing digitisation there will be little X-ray film. Patients will have their angiograms stored on compact

discs and not cine film. If we are not careful the film archive of radiology will be lost. We need to have a policy for the retention of archival film.

Prof. Tom Treasure: “You cannot see the future and you do not know what questions will be asked”.

Adrian Thomas

Wellcome witnesses to twentieth century medicine, Volume 2
Eds. E.M. Tansey, D.A. Christie and L.A. Reynolds
The Wellcome Trust 1998

This is the second volume published by the Wellcome Trust of transcripts of ‘witness seminars’ hosted by them. The aim of these seminars is to allow the original participants in medical discoveries or developments to meet in a relatively formal setting to reminisce about what really happened. The value of the transcript format is that readers can imagine they were present at the original seminars more easily than with a narrative account.

For radiologists the interest in this volume is the seminar on the development of NMR and MRI, held in July 1996 and chaired by Professor Robert Steiner. Radiologists need to be reminded of the pedigree of MRI, and how the basic principles of NMR were known over 50 years ago. It is a fascinating story, and one in which the UK’s role was paramount, not least because (for once), Government, academic medicine and industry worked successfully together.

NMR and MRI have what Professor Raymond Andrew dubbed a ‘pre history’. NMR was first discovered in 1945 independently by two groups led by Purcell and colleagues at Harvard and Bloch and his team at Stanford. Professor Gorter in the Netherlands however had looked for NMR as early as 1936 and 1942, attributing his lack of success to the use of materials with very long relaxation times.

Physicists did much work with NMR, and few had any idea of its potential as an imaging tool. Gadian, Radda and others in Oxford pioneered NMR phosphorus spectroscopy in muscle and liver in the late 70s. About this time EMI (who had developed the first CT scanners with Godfrey Hounsfield) began to explore MR imaging. Ian Young’s contribution to the discussion is too modest about his own role in this. His team produced a recognisable head image in 1977, and the story since then has been one of more-or-less steady improvement in image quality, scanning times, increase in magnet strength and growth in acronyms!

In the early 80s there were only three MRI units in the United Kingdom. Now most district hospitals (if they doesn’t have their own unit) have at least access to a visiting MRI scanner, and MRI has taken its place as a standard radiological technique, reigning supreme in neuro-imaging, and threatening CT in whole body applications now too.

The seminar format allows anecdotes and asides, and the discovery and development of MR was bedevilled by many all too human failings with rivalry between

companies, take-over battles and court room drama adding some spice to what could have been a dry technical saga!

The other seminars are on research in general practice, drugs in psychiatric practice and the history of the MRC Common Cold Unit.

Richard Henderson

Two bookplates of interest.



The bookplate of Sir William Crookes.

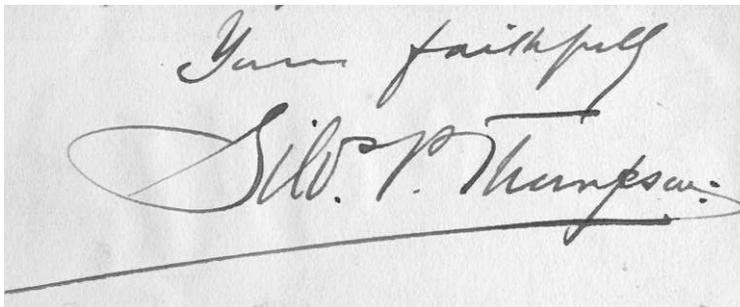
The radiometer that Crookes invented is seen in the lower aspect of the heraldic shield.

Wilhelm Röntgen discovered his new rays in 1895 using the Crookes tube.



Bookplate of Silvanus P Thompson (1851-1915).

Silvanus Thompson was the first President of the Röntgen Society that became the British Institute of Radiology. His collection of historical and contemporary books is now in the possession of the Institution of Electrical Engineers and is well worth a visit.



Signature of Silvanus P Thompson

**A NEW KIND OF RAY:
The radiological sciences in Canada 1895 - 1995 Les sciences radiologiques en
Canada**

Eds. John E Aldrich and Brian C Lentle, University of British Columbia, for the
Canadian Association of Radiologists, 1995. 470 pp. ISBN 0-9699557-0-7

This is a substantial book, in appearance, weight and scope. Printed with an attractive typeface on fine paper with specially commissioned artwork and some coloured illustrations, this tome gives the Canadian radiologists something to be proud of. It is

bilingual, the chapters in French relating to the French-speaking provinces and universities.

Like most of the centennial volumes, it begins with a short chapter on Röntgen himself, followed by “origins” and “pioneers”, who include Alexander Graham Bell and Ernest Rutherford. The introductory review also includes a short section on gas tubes, radiation oncology and nuclear medicine. A large section covers “Progress by Province”, then the regions and academic departments are dealt with. “Founders, Builders and Teachers” follows, then chapters on organisations, groups, programs and activities, concluding with “Radiological Sciences and the Graphic Arts”. The “Activities” section includes recent research, for example on interventional radiology of the biliary tract. There is a good balance between the decades and between the specialities of diagnostic radiology, radiotherapy and nuclear medicine. Radiography technicians are mentioned, though they probably don’t think they have a fair share.

There is a heavy emphasis on biographies and institutions, at the expense of technical details on the one hand, or any historical analysis on the other. A book written by and for radiologists is not likely to be critical of radiologists or their practice. Also it lacked a comparative study with similar bodies in the USA and Britain. Well, maybe it was there somewhere, but there is no list of contents and the index is so brief as to be useless.

The postscript includes the following: “Canadians in the radiological sciences - whether physicians, physicists or technologists - appear to have found it beneficial to preserve the best of regional and subspecialty affiliations while seeking a larger national identity.” Perhaps this is a lesson for Britain too?

Jean M Guy 18th April 1999

Interesting Web Sites

The New Wellcome Institute for the History of Medicine Library Website

This excellent and enhanced web site was launched on 23rd February 1999 and is to be found at www.wellcome.ac.uk/library. The site now contains many images and can be navigated quite easily.

Images from the History of Medicine (US National Library of Medicine).

This web site contains approximately 60,000 photographs and prints that can be downloaded. The collection is of the History of Medicine division of the US National Library of Medicine. This is an excellent resource for those interested in medical history and can be found at <http://www.wihm.nlm.nih.gov>. The collection includes portraits, pictures of institutions, caricatures, genre scenes and graphics and are in a variety of media, illustrating the social and historical aspects of medicine.

British Society for the History of Medicine, the 18th Congress.

This meeting will be held in Bodington Hall in Leeds from 8-11 September 1999. The Congress is being organised by the Yorkshire Society for the History of Medicine and Dentistry with the collaboration of the Yorkshire Branch of the Society of Occupational Medicine, The Thackray Medical Museum and the Leeds Philosophical and Literary society.

Enquiries regarding registration should be made to:

Susan Lacey, The Conference Office, University of Leeds, Leeds LS2 9JT

tel: 0113 233 6106 email: S.Lacey@leeds.ac.uk

37th International Congress on the History of Medicine

September 10-15, 2000 Galveston, Texas, U.S.A.

The International Society for the History of Medicine (ISHM) holds its 37th Congress in Galveston, Texas next year. If you are interested in attending then further information may be obtained from:

Dr Chester R Burns

37th ISHM Congress

The University of Texas Medical Branch

301 University Boulevard

Galveston

TX 77555-1311, U.S.A.

E-mail: cburns@utmb.edu

The congress has a Web Site: <http://library.utmb.edu/ishm>

Books for sale at Radiology 1999

TITLE	AUTHOR	PUBLISHER	DATE
Radiology Physics	J K Robertson	Chapman & Hall (1 st Ed)	1943
Radium Therapy, Its Physical Aspects	C W Wilson	Chapman & Hall (1 st Ed)	1945
Physical Foundations of Radiology	O Glasser et al	Hoeber (1 st Ed)	1945
The Physics of Radiation Therapy	H E Johns	Charles Thomas (1 st Ed)	1953
Actions of Radiation on Living Cells	D E Lea	CUP (1 st Ed)	1953
Radioactivity & Nuclear Physics	J M Cork	Van Nostrand (1 st Ed)	1947
Handbook of Industrial Radiography	J A Crowther	E Arnold (1 st Ed)	1944
The Acceleration of particles to High Energies	Oliphant et al	IOP	1950

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Fundamental Physics	Conference Report	Phys Soc.	1947
Ions, Electrons & Ionising Radiation	J A Crowther	E Arnold (7 th Ed)	1941
X-rays and Radium in the Treatment of Diseases of the Skin	G M MacKee & A C Cipollaso	Lea & Febiger (1 st Ed) (inscribed by author)	1947
British Practice in Radiotherapy	E Rock Carling et al	Butterworth (1 st Ed)	1955
Cancer, Where we Stand	S Russ	Oxford (inscribed by author)	1950
The Sufferings of the Cancer Patient	V M Naylor & D Michaels	Hutchinson	1961
Electricity & Matter	Thomson	Archibald Constable	1905
Radioactivity	Rutherford	CUP	1906
A Treatise on Hydromechanics	Besant & Ramsey	Bell, London	1911
New Cancer Facts	Masters	Bodley Head	1925
Joule & the Study of Energy	Alec Wood	G Bell & Son	1925
Readable Relativity	C V Durrell	G Bell & Son	1926
The Cancer Question – Reproduction Theory	Tomlinson	Balliere Tindall	1927
The Causes & Cure of Cancer	Tomlinson	Chalfont Bros	1928
Physics of X Ray Therapy	Mayneord	Churchill	1929
The Truth About Cancer	Murray	British Empire Cancer Campaign	1930
Physics	Booth & Nicol	Australian Medical Publishing	1931
Protection; Radium & X-rays	WHO	League of Nations	1931
Internazionaler Radiocongress Zurich			1934
Physics for Medical Students	W H White	Richard Clay	1935
5 th International Congress of Radiology			1937
7 th International Congress of Radiology			1939
Elementary Physics	Stead	Churchill	1940
Introduction to Atomic Physics	Bragg	Longmans Green	1942
A Textbook of X-Ray Diagnosis	Shanks, Kerley & Twining	H K Lewis	1944
Optics	Fincham	Hatton Press	1945
Introduction to Atomic & Nuclear Physics	Semat	Rinehast	1957
Elements of the Universe	Seaborg, Glenn	Methuen	1959