

Medical Illustration

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Week 14, Sem 1, 13-06-2003

Accuracy and Aesthetics
Form follows Function

History and Practitioners

Available Techniques of Viewing the Body
Relationship between Scientist and Artist
Available Artistic Skills

Past: Galen, Mondino de Luzzi
Berengario, Estienne, Eustachio,
Dryander, Fabrici, Giovanni Baptista
Canano, Leonardo da Vinci, Vesalius,
Albinus.

Present: Max Brodel, Gerald Hodge,
Levent Efe

Collaborative / Freelance

Purpose and Process

Specialist / Layman

Presentation Format

Books (instructional / story)
Textbooks / Journals
Catalogues (products / exhibition)
Magazines / Newspapers
Brochures (health promotion / services)
Posters (conferences / billboards / museums)
Websites / CD Roms / TV (3D, interactive)

Client

Educational - Primary / Secondary / Tertiary
Health Departments and Organisations
Publishing Companies
Health Product Companies

Techniques

- Carbon Dust & Dry Brush (Brodel)
- Pen & Ink
- Scratch Board
- Coquille Board
- Pencil
- Paint – Watercolour / Gouache / Acrylic / Oil
- Airbrush
- Computer generated or manipulated

Associations

Illustrators Australia 03 5956 9587
www.illustratorsaustralia.com/

Centre for Research and Education in
the Arts - www.crea.uts.edu.au/

Association for Educational
Communications and Technology
<http://www.aect.org/>

Canadian Society of Children's Authors,
Illustrators and Performers
<http://www.canscaip.org>

Communication Arts
<http://www.commarts.com/CA/>

Illustrators Partnership of America
<http://illustratorpartnership.org/>

International Visual Literacy Association
www.ivla.org/

Society of Children's Book Writers and
Illustrators – www.scbwi.org/

The Association of Illustrators (UK)
www.theaoi.com/

The Association of Medical Illustrators
(USA) - www.ami.org/

The Society of Illustrators (USA)
www.societyillustrators.org/



Vesalius, "Fabrica", 1543 AD

What is Medical Illustration?

Hodges, Elaine R.S. (Ed.) The Guild Handbook of Scientific Illustration Van Nostrand Reinhold, New York, 1989 p428.

"A medical or surgical illustration that literally copies visual fact would be no more useful than a decent photograph. A good medical illustration is neither a photorealist exercise nor an oversimplified diagram. Ironically, the skill is more often in knowing what to leave out than what to put in. The spectacular visual impact of highly rendered anatomical artwork belies the true nature of most medical illustration which is to communicate effectively the client's message, using the most appropriate style and media, be it elegantly concise or elaborately complex."

Dr Levent Efe

<http://www.medicalarts.com.au/index.php?fuseaction=content.whatis> Accessed 08-06-03

"Medical illustration is art as applied to medicine, a graphic and visual interpretation of biomedical material. It is used effectively in all major markets, including advertising, editorial, institutional and instructional. Biomedical images can be highly realistic and anatomically accurate, or abstract and wildly conceptual in their approach."

"To visually portray an idea clearly and effectively, we believe a medical artist requires a strong background in human biology and anatomy. He/she should also be a good communicator, versatile in a variety of digital and traditional techniques, and be creative & imaginative."

"Our philosophy is to make medical information understandable by the audience in the best and quickest way possible. Aesthetically pleasing images are indeed highly regarded, but in an era when consumers of medical art may not have more than a few seconds to view an image, there is no room for distraction from the main topic. At the same time we strive to maintain anatomical accuracy."



<http://www.medillsb.com/> (Association of Medical Illustrators - Medical Illustration Source Book)

Simpson, Ian. The New Guide to Illustration, Phaidon, Oxford, 1990, p140, ISBN 0-7148-2628-6).

"The structure and function of the body in health and disease has always been a collection of fascinating puzzles. It was Leonardo da Vinci (1452-1519) who said that it was impossible to describe the complexities of the human body without the aid of drawings. "The more thoroughly you describe, the more thoroughly you will confuse." Five hundred years later, that statement is perhaps even more true. As science reveals more answers, the puzzles become more intriguing and, for the teacher and illustrator alike, their elucidation becomes a more complex task."

"There are some 60 qualified medical illustrators in this country [USA] who have braved the lengthy postgraduate training and are practising in hospitals, medical schools or in a freelance capacity. Their work encompasses an enormous range of activities from traditional anatomical illustration and the pictorial description of surgical operations, to the design of health education material for public and patients. Every communication medium is utilized from print to interactive videodisc technology. Every artistic skill and technique is involved from graphic design and typography to the very highest quality of watercolour painting. It is this great variety, together with the intellectual challenge involved, that makes the job so attractive and stimulating."

"A medical illustrator may, for example, be required to create a three-dimensional representation of the intimate structure of a virus from microscopic evidence, devise a sympathetic but honest explanation of cancer treatment for afflicted patients or illustrate the stages in a complex operation of the brain, all of which require a considerable scientific knowledge and highly developed visual imagination and great attention to detail."

"Hours of drawing in the operating theatre or autopsy room, strict adherence to the laws and disciplines of science and the modest financial returns are not for everyone, but for some this is a profession full of interest and its own special rewards."

Further Reading

Cutler, Daniel S, "Art in the Service of Science", Step-by-Step Graphics, Nov-Dec 1987, Vol 3, No 7, p82-91

Guinness, Alma E (Ed.). The Body Book : an illustrated guide to the world's most amazing machine. 1st ed. Reader's Digest, Sydney, c1986, ISBN 0-86438-015-1 (UNSW CFA 612/13).

Miller, Jonathan and Pelham, David. The facts of life : a three-dimensional study, Cape, London, 1984 (UNSW CFA 612.6/3).

Roberts, KB and Tomlinson, JDW. The Fabric of the Body : European traditions of anatomical illustration Clarendon Press, Oxford, 1992, ISBN 0-19-261198-4 (UNSW CFA 611.00222/3).

Wood, Phyllis. Scientific Illustration: a guide to biological, zoological and medical rendering techniques, design, printing, and display (2nd ed). New York, Van Nostrand Reinhold, 1994 (UNSW CFA 743.83/2).

An medical illustration by surgeon Frank H. Netter the "Normal Rockwell of Medical Illustration." Netter's work is particularly noteworthy for adding the human element in character's. Art that cuts to the bone: Frank Netter exhibit at the Morris Museum.