

Medical Illustration

Lecture Notes by Kathryn Skelsey (<http://www.kathrynskelsey.com/>)
for BFA Subject: History of Drawing, 2003

Focus - Medical Illustration for Children' Health Education

Medicine - Physical therapy, Health Promotion
Art - Illustration
Children - Education

Medical Illustration

History and Practitioners

- to give context to current day practises
- will include brief display of examples of relevant associations, literature and training

Purpose and Process

- intended outcome and available resources (funds) governs the planning processes
- therefore consider commissioning client, intended viewer, presentation format
- Client / Artist collaborative relationship

Techniques

- dependent on purpose
 - some specific to illustration (carbon dust)
-

Dr Levent Efe

<http://www.medicalarts.com.au/index.php?fuseaction=content.whatis>

Accessed 08-06-03

What is Medical Illustration ?

“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. “

Philosophy;

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, strive to maintain anatomical accuracy.

History - Considerations

Available Techniques of Viewing the Body

- Moral / Ethical / Religious Restrictions
- Technology (eg, Xray, CT scans, MRI)

Relationship between Scientist and Artist

- Initial Purpose
- Acknowledgement

Available Artistic Skills

- Visual Sophistication
 - Rendering media and methods
-

History - Artists

Galen

Vesalius

Leonardo da Vinci

Present Practitioners

- Group Collaboration - Publishing house
 - Medical Illustration Unit

Individuals – Freelance

(Scientist as Artist)

Purposes - Specialist

Anatomical Knowledge

Training of techniques – surgery / procedure

Explanation of research hypotheses

Promotion of products (pharmaceutical / tools / equipment)

Purposes - Layman

Health Education / Promotion

- Instruction - How, what, when, where..

Motivation – Why

Advertise health products

Clients

Educational Departments (school, university)

Health Departments and Organisations

Publishing Companies

Health Product Companies

Presentation Format

Books

- Activity Tools
- Direct Instruction
- Story

Textbooks / Journals

Presentations

- Conferences – powerpoint

Catalogues

- Products
- Pharmaceutical / Vit Min
- Walking Aids
- Orthopaedic Orthoses

Magazines / Newspapers

- National Geographic
- Dolly

Brochures

- Promotion of Health
- Publicity of Services

Posters

- Scientific Research Posters at conferences
- Public Health Promotion - Billboards
- Trade displays, Expos
- Museum Displays – may be 3D / interactive

Websites / CD Roms / Computer Terminal displays and projections / TV programs

- all of the above
 - eg. 3D images
-

Examples

Books

- Pop up book
- Dorling Kindersley / Readers Digest
- Story Book

Magazines / Newspapers

Posters

- Template
- Finished

Museum Displays

Communication Process

Requires language exchange

Client (eg doctor) – needs to be able to visualise and accurately describe the requested image (eg. surgical procedure).

Illustrator – needs to be able to understand medical terminology, and have some anatomical knowledge.

Techniques

Carbon Dust

Pen and Ink

Scratch Board

Paint – Watercolour / Gouache / Acrylic

Airbrush

Computer generated or manipulated

(Illustrator, vector based)

Professional Illustrators' Associations and Institutions

Australia

Illustrators Australia

CREA

USA

Society of Illustrators

The Association of Medical Illustrators

The Society of Children's Book Writers and Illustrators (SCBWI)

Canadian Society of Children's Authors, Illustrators and Performers (CANSCAIP)

Others

Society of Publication Designers

By no means a comprehensive list. Many others in other countries (Ireland, Hong Kong, Israel,

Professional Illustrators' Journals and Literature

The Journal of Audiovisual Media in Medicine

Step-by-Step Graphics

Illustration

American Illustration

Communication Arts

American Illustration Annual

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

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.

Illustration Training

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“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 and imaginative.”

Some training in medical terminology
Observation of cadavers
Background as a medical practitioner.

Levent Efe received his medical degree in Istanbul, Turkey in 1982. After four years in General Practice, he taught Anatomy in the Marmara University Medical School in Istanbul, and Artistic Anatomy in the School of Fine Arts of the same university.

He then undertook a fellowship in the Department of Art as Applied to Medicine, at Johns Hopkins Medical School, Baltimore, Maryland, in 1988.

UTS
Newcastle

Current Day Considerations

Computer Domination
Poor Remuneration and Career Opportunities
Medical Knowledge
Technical Skill

Challenging
Rewarding

In Conclusion

History
Variety of techniques
Applies meaning and value to images, clearly and concisely
It may require meticulous reproduction of detail but it is limited only by the imagination !