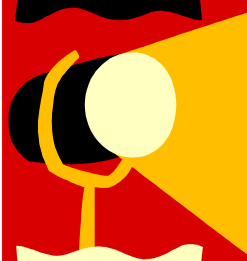


AIHA Internet Resources Digest

Supporting Access to the High Quality Online Resources

August 2014



Spotlight on: Resources on Biomedical Engineering

Biomedical engineering (BME) is the application of engineering principles and design concepts to medicine and biology for healthcare purposes (e.g. diagnostic or therapeutic). This field seeks to close the gap between engineering and medicine: It combines the design and problem solving skills of engineering with medical and biological sciences to advance healthcare treatment, including diagnosis, monitoring, and therapy.

http://en.wikipedia.org/wiki/Biomedical_engineering

Professional Organizations

Engineering World Health



Engineering World Health is a non-profit organization that mobilizes the biomedical engineering community to improve the quality of health care in hospitals that serve resource-poor communities. They install donated and newly-designed medical equipment, carry out repairs, and build local capacity to manage and maintain the equipment. They also harness the resources of university engineering programs through a

network of university-based chapters and partnerships with Duke University and Texas A&M University to manage a summer program which sends student engineers to developing country hospitals to work, learn, and teach.

EWH supports training programs in Asia, Africa and Latin America that are building a workforce of in-country biomedical engineering technicians and instructors. Working in partnership with local hospitals, educational institutions and governments, EWH is improving local capacity to run efficient hospitals up to international standards now and in the future. EWH offers products that create awareness of healthcare needs in the developing world and that support education to address these needs.

Kits curricula introduce students to principles of biomedical engineering. We offer science, technology, engineering and math (STEM) Kits for K-12 students and Advanced Kits for university, technical school, and BMET students.

<http://www.ewh.org/>

Biomedical Engineering Society



The Biomedical Engineering Society (BMES) is the professional society for biomedical engineering and bioengineering. Founded in early 1968, the Society now boasts nearly 6,500 members and is growing, rapidly. BMES serves as the lead society and professional home for biomedical engineering and bioengineering. The society provides accreditation, potential licensure, publications, scientific meetings, global programs. Though most of information on the web-site is member-restricted you can find useful links to other online resources.

<http://bmes.org/>

Journals

BioMedical Engineering OnLine



BioMedical Engineering OnLine is an open access, peer-reviewed journal that is dedicated to publishing research in all areas of biomedical engineering. With free registration you will receive news and article updates by e-mail. Published by BioMed Central.

BioMedical Engineering OnLine is aimed at readers and authors throughout the world with an interest in using tools of the physical sciences to advance and understand problems in the biological and medical sciences. There are biomedical engineers in countries throughout the world, and the results of their work are scattered and often difficult to access.

This publication promotes the rapid and free accessibility of articles for biomedical engineering researchers everywhere. The result is a worldwide community of biomedical engineers who are linked together by their various research interests and their values in promoting benefits to all of humanity.

<http://www.biomedical-engineering-online.com/>

BMC Medical Physics



BMC Medical Physics is an open access, peer-reviewed journal that considers articles on all aspects of medical physics, including radiobiology, radiation therapy, nuclear medicine, ultrasound, imaging, photomedicine and physiological measurement.

It is journal policy to publish work deemed by peer reviewers to be a coherent and sound addition to scientific knowledge and to put less emphasis on interest levels, provided that the research constitutes a useful contribution to the field.

With free registration you will receive news and article updates by e-mail. Published by BioMed Central.

<http://www.biomedcentral.com/bmcmedphys>

Journal of Biological Engineering



Journal of Biological Engineering, the official journal of the Institute of Biological Engineering, is an open access, online journal that publishes articles on all aspects of biological engineering. With free registration you will receive news and article updates by e-mail. Published by BioMed Central.

<http://www.jbioleng.org/>

Annals of Biomedical Engineering



Annals of Biomedical Engineering is an interdisciplinary, international journal which presents original and review articles in the major fields of bioengineering and biomedical engineering.

A major aim of bioengineering is to provide integrated approaches to the solutions of biological and biomedical problems. The philosophy is to provide engineering approaches to enhance the power of the scientific method, and to maintain a balance between experimental observation and quantitative analyses. This is the official journal of the Biomedical Engineering Society. Selected articles are available for free. Selected free articles could be found through PubMed search (free full-text filter)

<http://link.springer.com/journal/10439>

Annual Review of Biomedical Engineering



The Annual Review

of Biomedical Engineering, in publication since 1999, covers the significant developments in the broad field of Biomedical Engineering, including biomechanics, biomaterials, computational genomics and proteomics, tissue engineering, biomonitors, health care engineering, drug delivery bioelectrical engineering, biochemical and biomedical imaging topics. Selected free articles could be found through PubMed search (free full-text filter)

<http://www.annualreviews.org/journal/bioeng>

Insights into Imaging



Insights into Imaging (I³) is a peer-reviewed open access journal published under the brand SpringerOpen. All content published in the journal is freely available online.

I³ continuously updates scientific knowledge and progress in best-practice standards in radiology through the publication of original articles and state-of-the-art reviews and opinions, along with recommendations and statements from the leading radiological societies in Europe. Founded by the European Society of Radiology (ESR), I³ creates a platform for educational material, guidelines and recommendations, and a forum for topics of controversy.

<http://link.springer.com/journal/13244>

Books

InTech books on Biomedical Engineering



InTech is the world's largest multidisciplinary open access publisher of books covering the fields of Science, Technology and Medicine. Since 2004, InTech has collaborated with 87040 authors and published 2405 books and 6 journals with the aim of providing free online access to high-quality research and helping leading academics to make their work visible and accessible to diverse new audiences around the world. Includes about 80 open access books on biomedical engineering and related topics.

<http://www.intechopen.com/search?q=biomedical>

Training Resources

Frank's Hospital Workshop



This is a private and noncommercial website which can be used for self-study. It is a collection of documents, experiences, best-practice procedures and teaching and learning materials about biomedical engineering for developing countries.

Here you find: the documents about biomedical technology; user and service

manuals; training courses.

www.frankshospitalworkshop.com

Biomedical Equipment Technology Sequence: Application, Support and Management



These courses are designed for clinical and technical staff working in healthcare who need to utilize or support medical devices in acute patient care, have responsibility for medical equipment planning or life cycle management or students or adult learners who want to know more about the exciting area of medical equipment and ongoing management and support to enhance patient care and improve patient safety. There are four online courses offered at the University of Vermont for fee. On the web-site you can also find Free Module samples

<http://its.uvm.edu/medtech/Tmodule.html>

Webinars

Recorded webinars from TechNation on hospital equipment management and related topics

<http://iamtechnation.com/webinars/>

About the AIHA Internet Resources Digest

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If you have a suggestion for a Digest topic, or would like to contribute information about Internet resources, please contact [ibra\[at\]zadar.net](mailto:ibra[at]zadar.net).

Back issues of the *Internet Resources Digest* for 2011-2014 are archived at www.healthconnectintl.org/resources.html.

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