

Memberships

American Society of Anesthesiologists

www.asahq.org

Page for the ASA. From here if you are a student you can sign up for a membership for \$10 a year which includes a subscription for a year to Anesthesia monthly journal. You can search the page or follow a link for information about the medical student section:

<http://www.asahq.org/asarc/students.html>

Otherwise the site offers many good recourses for practice as an anesthesiologist, but not much for students other than dates of conferences and local events being planed.

Society for Education in Anesthesia

www.seahq.org

Most of the features of this site are only available after an easy registration that takes about a minute. Some particularly useful information is the SEA Medical Student medication list from the Medical Student Committee which is available for download from the site. I saw that there are a number of educational meetings to attend but could not find the cost of attending. I assume they are not free. The site should post cost before registration information.

Anesthesia Patient Safety Foundation (APSF)

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

This is a site dedicated to information to keep you from screwing up and hurting someone, which is always good. The information found on the site is easy to access and no membership is required. All the prior newsletters are available to read. A good source for those interested in Anesthesia research. There is an extensive section on data collection and ongoing projects, as well as future questions in anesthesia that research hopes to answer. As a student I found the information very useful for anyone wishing to give a presentation on patient safety issues in anesthesia.

The Society for Technology in Anesthesia

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

Free membership for students and residents. This site focuses mainly as a source of information about their meetings. They offer three grants a year for research oriented towards technology in anesthesia. The home page offers an updated box with links to articles regarding technological advancements in Anesthesiology

Journals/Publications

Audio Digest in Anesthesia:

www.audio-digest.org

Journals on tape for doctors. The purpose of this site is to stay up to date in whatever field you are in. It offers audio compilations of the most relevant topics in many medical specialties. Each CD is \$18. I would never have known this existed. This would be most useful to listen to on the commute to work. A great resource to be aware of.

Anesthesia and Analgesia:

www.anesthesia-analgesia.org

A major journal in the field of Anesthesiology. A membership A&A will give you a membership number to the site, which will allow you to search for any previous article found and download it. You can search for abstracts for free

Anesthesiology:

www.anesthesiology.org

Similar to A&A. Anesthesiology will let you download prior and current articles in PDF format with a subscription.

Journal Education and Perioperative Medicine

(JEPM):

www.jepmadmin.org

Full access to prior articles is available for Free. Related to all aspects of preoperative care, from Anesthesia, to surgery and medicine, pain management and ICU. Not anesthesia specific, but oriented towards anesthesia.

Journal of Clinical Anesthesia:

www.arsmedica.com/es/es-9202.html

Resource to buy some really expensive volumes of International Journals. No real utility at this point.

Mallampati Classification

www.anest.ufl.edu/at/case1/mallampati.html

A nice little self tutorial on airway evaluation from the University of Florida. I found it very useful for both those needing an introduction or refresher. Geared towards earlier stages of learning, it has links and harder questions that could be useful during internship and early residency.

Intubation Techniques and Tutorials

<http://vam.anest.ufl.edu/airwaydevice/>

Great recourse for intubation techniques with the various equipment available. I would certainly use this site for information regarding fiberoptic intubation and general techniques. Good step by step format for learning. Short and free, with links to relevant articles.

Most of the information on this site is geared towards a resident knowledge level however the site is useful for getting a general sense of the basics (and hazards) of intubation. It is useful to use the site to familiarize yourself with the names of the many airway devices and the power-point tutorials walk you through the essential information regarding each device complete with journal references. The Step by Step Guide to Intubation is a fun way to review what you've learnt in the O.R. and with a bullet-point layout it's easy to follow.

Virtual Anesthesia Textbook

<http://www.virtual-anesthesia-textbook.com/>

A huge resource for Anesthesia related topics, from basic science to advanced techniques. I found the drug sections particularly useful with their table based format that was easy to navigate. The volatile agents section was well put together as well. I don't believe this would substitute for a formal Anesthesiology text, but might make for a good review of relevant information before an anesthesia rotation. The site requires a little bit of patience to navigate as many of the resources are links to links and so on.

This resource is an attempt to put a textbook of anesthesia basics online. The quality of the information is rather uniform. This is likely due to the "chapter managers" who are responsible for their respective sections. This resource is also subject to peer review, however the rigor of that review is not clear. The depth of information is what varies considerably. The site does have some of its own text. However, many chapters rely on links to other sources. This enhances the variability of the depth of information. Furthermore, some of the links do not work. This resource is less of a textbook and more of an organization of other useful anesthesia resources. It is not particularly easy to use and I would reference Miller before I used this resource. I would consult this if Miller or a similar textbook did not have the nugget of information I was seeking.

Virtual Anesthesia Machine:

<http://vam.anest.ufl.edu/>

A great resource for a free anesthesia simulator. The simulations let you adjust different variables and see the outcome. It takes some time to figure out the setup and functions if you are not familiar with anesthesia equipment. I feel this is a great way to visualize the machinery used by the anesthesiologist. The site requires registration which is free. The most useful section of the site is the VAM workbook, which is a step by step guide to the fundamentals of mechanical ventilation and administration of volatile anesthetics.

Drugs used in anesthesia:

http://msquared.anest.ufl.edu/aig/Anesthesia_Drug_Tables.htm

Another good chart based resource. Not as condensed as the Drug dosing card but offers easily printable tables for most anesthetic agents.

This site provides a very clear organization of drug information. Particularly useful is the opiod chart which not only compares potency (conveniently with morphine as the base potency) but also lists duration which many opiod tables neglect.

Classification of non-depolarizing muscle relaxants by speed of action is also very useful. I found this resource best used by printing it out on small font and constantly referring to it whenever the drug is used in the OR. Before long the table is in my head and a large amount of data is well organized.

This resource was pulled directly from Essential Anesthesia: From Principles to Practice 2004.

Drug Dosing Card:

http://www.iupui.edu/~anesth/anes_refcard.pdf

This link is to a two page PDF of Anesthetic dosing as well as effects of administration. A well laid out chart format that I will definitely use. For Adult and pediatric anesthesia.

This two-sided quick reference card is in colour and organized neatly by classification of drugs and places of use. A handy guide for pediatric anesthesia is also included. Download it for free, print it and laminate the card for longer durability. Fits easily into a white coat or the pocket of your scrubs.

Anesthesia Resident Simulation Sessions

http://anesthesia.iu.edu/online/education/simlab/edu_materials.html

Powerpoint presentations on important Anesthesia topics such as Intraoperative Hypoxia, and Intraoperative Ischemia. The presentations seem to be well done, and correct and focus on relevant information for the anesthesiologist. A good review prior to an anesthesia clerkship.

Regional Anesthesia:

<http://www.depts.washington.edu/anesth/regional/Page1.html>

Great technical site about the indications and the administration of Regional Anesthesia. It could benefit from a few more pictures to illustrate the discussion but worthwhile if you have an anatomy book to follow along. In most cases too advanced for the medical student, but good if you see a regional block performed and want to read over the specifics of the procedure. A unique site, good to know about.

Transesophageal Echocardiography:

www.gasnet.org/echomanual/

A must read for those interested in cardiac anesthesia. The explanation of basic TEE reading was very useful at any level. The step by step format was excellent at pointing out the major anatomic features of the heart as well as good descriptions of TEE techniques. Beyond the basics the site had tutorials for multi-plane imaging and analysis of the heart valves. These sections were readable but could benefit from some additional pictures. Best to do in conjunction with a cardiac block although good general information at any level.

Fault Algorithms

<http://vam.anest.ufl.edu/algorithms.html>

This link offers an analysis of a problem in the anesthetic machinery which led to the death of 2 patients in NC when NO₂ instead of O₂ was administered. Very specific, but good information to be aware of at the residency level.

The Answer Page:

www.theanswerpage.com/anesthesiology

A question of the day format with Anesthesia related questions, a new topic each week. Might make for a good homepage.

GASNet Guidebooks:

www.gasnet.org

Information on various mixed topics from guidelines of author citation to Job listings. The site offers a compilation of various “practical” tips. Actually I found the site to be fairly useful. The site provided links to many articles and resources geared towards the private practice anesthesiologist.

Scutwork.com

www.scutwork.com

A great resource for reading about programs. I was surprised how many people did not know about this site. Suffers from the pitfalls of most review sites which is disinformation, so reviews need to be taken with a grain of salt. Good to have on the disk. Also, does not have reviews on every residency program. For example, no one has rated the UCSF program which I do not consider obscure. Some of the program reviews are very dated as well.

If you have extra-time this is a fun site to click your way through. The reviews on individual anesthesia residency programs are particularly interesting as they’re written by current residents. They provide a cut and dry glimpse into the “real” lives of residents in the program.

The “Top Rated” section is not very helpful as it is solely based on the individuals that take the time to make a submission and rank their program. When Interviews approach this site may be useful as it provides the current name, email, address and contact number of the Residency Director for each school. Keep in mind that there is an assorted range of advice out there and while the majority of it is valid, read everything with perspective.

FREIDA Online

<http://www.amaassn.org/ama/pub/category/2997.html>

Essential for finding a residency.

ERAS (Electronic Residency Application Service)

<http://www.aamc.org/audienceceras.htm>

Probably don't need to list this site

National Resident Matching Program (NRMP)

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

Probably don't need to list this site

Gaswork

<http://www.gaswork.com/>

Gaswork is THE better of the two (vs GASNet Jobs Board) resources as far as usability and searching goes.

GASNet Jobs Board

<http://www.gasnet.org/jobs/index.php>

The Global Textbook of Anesthesiology

<http://gasnet.med.yale.edu/gta/>

Brief, but inclusive, synopsis of the key point of the topic. Breaks the topic down into easy to follow subheadings. Not too lengthy (~1.5 page/chapter) but with enough substance to answer your question and provide you with an overall sense of the topic. This is an incredibly useful site when you have 5 minutes before a case starts and you're looking for a quick synopsis of the patient's illness and how it pertains to their anesthetic course. To obtain access to this site you are required to register which takes about 30 seconds and requires only a name, password and email address.

PALM RESOURCES

GASNet Software Resources

<http://gasnet.med.yale.edu/pda.php>

Offers only two Palm programs: Pediatric syndromes and the The Global Textbook of Anesthesia. Both free.

GASNet PDA Resources

<http://gasnet.med.yale.edu/software/index.php>

Must sign in with email address. Free site. Provides list of links to pages with programs for computer or handhelds, reviews of such resources, and more lists of links. Not all the links work, but if you have time to shop around, this site is a good portal to some interesting sites.

Gainesville Anesthesia PDA Software

<http://gaps.anest.ufl.edu/palm.html>

Free program that requires Avantgo download too. Easy instructions at site. You can preview program before downloading at <http://gaps.anest.ufl.edu/palm/start.html>.

Drug Reference

www.epocrates.com

Free drug reference is priceless. It's such a popular program there are many reviews available on the web, but there are few reasons not to get it.

Infusion Calculator

http://aetherpalm.com/infusicalc_dl.asp

\$15 with free demo version. For Mac/PC. Allows calculation of infusions of drugs along with dilution calculators.

Anesthesiology/Critical Care Drugs

<http://www.gaspalm.co.uk/>

A portal to many programs of interest. Includes reviews, downloading links and instructions.

The quality of the different PDA sources listed on this website varies tremendously and the site has not been updated since 2003. The advantage is that the majority of the programs listed are free to download. The John Hopkins Antibiotic Guide is very high yield. You can search the guide by diagnosis, pathogen or by antibiotic. I found it most useful in the ICU setting. The Guide can easily be downloaded by following the link and registering with the program (requiring only a username and email address).

ABGPro:

www.stacworks.com/index.html

This is another calculator for palm. Does pretty much what it says: interprets ABGs. However this should only be used to complement an understanding of ABG, not substitute it. The URL should be corrected: www.stacworks.com

Works, the www...../index.htm does not bring up the site.

Best of all: it's free

MedCalc:

www.med-ia.ch/medcalc/

MedCalc contains an extensive list of medical formulas commonly used in everyday clinical care. The added advantage of this palm program is that it not only acts as a calculator but it also follows up the calculation with useful information regarding the formula and values that you received. This can save you time as you don't need to go searching through other programs to learn the significance of your calculated values. The "Infusion Management" module is similar to the many other PDA calculators out there. There is a link that enables you to do conversions (eg: mcg/kg/min to mg/h) and the drug directory includes a very comprehensive list of anesthetic drugs.

Aetherpalm

www.aetherpalm.com

This one can only be downloaded for \$15.

There is a demo version but it only works for 21 days.

The windows version of the demo is currently unavailable

ASA Palm Resources:

www.ASAhg.org/Links/palm.htm

This website contains mostly the palm resources listed in this resource guide. It is a bit redundant, however if the ASA updates it periodically then it would be good to be aware of this site.

Ectopic Brain

www.pbrain.hypermart.net

I did not find this particular site very useful. It is not geared towards anesthesia and serves more as a general medical site for palm application. Which, by the way, were not easy to locate. I recommend removing this from the list.

Handheldmed

www.handheldmed.com

This resources involves generating an account which allows one to try and buy their products. It is also not geared towards anesthesia and is more of a Palm reference rather than a learning tool.

Palm Anesthesiology:

www.palmsource.com/interests/anesthesiology

This is a fantastic website! Organized by a practicing anesthesiologist, this website is a wonderful compilation of some of the most useful and specialty specific software for anesthesia training. Approximately one-quarter of the programs are free to download whereas the remaining cost between \$15-\$65. The PainSTAT Opioid Guide is one of the few PDA resources specifically aimed at Pain Management. There is a calculator to help you convert one narcotic to another, with a short paragraph containing the most pertinent clinical information about the narcotic.

pdaMD

www.pdamd.com

This site is also not geared towards anesthesia.

Skyscape:

www.skyscape.com

This website is organized by specialty; the anesthesia section has links to nine different programs for your handheld. All of the PDA programs can be downloaded with a price range of \$50 - \$134. While it may be expensive, keep in mind that these PDA downloads are actually the compilation of entire anesthesia textbooks, including the popular "*Sota Omoigui's Anesthesia Drug Handbook*". The convenience is that you can store all of this information on your palm and have it with you wherever you go, for quick retrieval. The site is also useful as it enables you to check out programs for other specialties that might be helpful (i.e. *The Washington Manual* in Internal Medicine). If you need a little help with your Spanish and your white coat doesn't have room for a Spanish Dictionary then download *English & Spanish Medical Words & Phrases* (refer to Emergency Medicine section) – it's an easy to use book of translations with all of the most commonly used medical terms.

AvantGo

www.avantgo.com

A program for your palm that allows you to sign up to channels which are updated at each sync and basically allow you portable access to the web. It can also work with wireless internet connections for on-the-go updates. This program is required for access to many web-based PDA applications including some patient encounters tracking programs. The basic service is free and includes your choice of 100's of channels covering health, business, sports, entertainment, etc. The power-version allows you to have more channels at once and is \$20/year.

Drips

www.pdacortex.com/drips_download.htm

This PDA program allows you to calculate IV doses of drugs quickly and efficiently at any place, at any time. The main advantage is that it's on your palm so you don't have to carry around extra note cards or calculators. Additionally, there is an option that allows you to save frequently used drug combinations for quick referral in the future.

The program is *free* to download and is very user friendly. The one caveat is that if you already have *Epocrates* on your palm then this resource is redundant as a fairly similar "dose" calculator is included with your *Epocrates* subscription.