demonstrate problems produced by a poor choice in scan frequency, pulse repetition frequency, or other parameters. Many cases provide sequential images demonstrating artifacts produced by color or power Doppler techniques, and power Doppler is not presented as a gimmick or a cure-all. Ultrasound images are also supplemented nicely with CT and angiogram images on the same patient. The strength of this work resides in the large number of detailed duplex images obtained in the clinical setting of a large tertiary care center. The cases include a number of examples that would be extremely rare in routine clinical practice. The description of the pathology and the references are somewhat spartan, but this is certainly not the focus of this book.

Although this text appears to be directed toward radiologists and radiology residents, it would also be excellent for vascular technologists, fellows in vascular surgery, and vascular surgeons who want an update that includes power Doppler illustrations covering a wide variety of pathology. The text does include a number of case files that are not likely to be of interest to a primarily vascular audience, such as examples of Echinococcal cyst, appendicitis, and various malignant diseases. The use of a text with such a broad scope, however, is demonstrated by a simple list of the differential diagnosis of renal infarction, for example. In addition to listing the differential diagnosis, actual ultrasound images demonstrate how renal infarct, pylonephritis, renal abscess, and hypovascular tumor can all appear similar using this technology. Conditions, such as nephritis secondary to lithium toxicity, transplant rejection, and transplant renal artery stenosis, are all illustrated and discussed in a manner that will improve the readers' ability to detect and differentiate these relatively uncommon diagnoses. Overall, approximately half of the book is devoted to cases that should be of great interest to any vascular technologist, vascular fellow or vascular surgeon. Almost all of the cases illustrated in this text are worth a review by those performing or reviewing color and power Doppler images in a noninvasive vascular laboratory, because incidental findings or errors in diagnosis will be more easily detected by those aware of the full spectrum of potential pathology. As a teaching file, I think this compendium will be quite valuable to radiologists and radiology residents. Consideration should also be given for purchase as a reference text for the noninvasive vascular laboratory or for anyone who frequently reviews color Doppler ultrasound studies.

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Operative trauma management: an atlas
C. James Carrico, Erwin Thal, John Weigelt; Stamford; 1997; Appleton & Lange; 335 pages; $175.00.

This is a multi-authored text edited by three trauma experts currently or formerly from the Department of Surgery at the University of Texas Southwestern Medical School, a leading center for trauma care. The other contributors are also from prominent trauma centers in the United States and Canada. The editors state that their purpose was to provide the reader with clear illustrations of procedures for the management of injuries to individual organ systems. They also wanted to communicate the essential points of the operative care of traumatic injuries in a concise manner. The editors have definitely accomplished their objectives in an outstanding fashion.

With the exception of intrathoracic trauma, this atlas is comprehensive in covering nearly all aspects of trauma care to the various organ systems. It concisely illustrates procedures ranging from basic airway management to Whipple operations for pancreatic trauma. It even includes a section on intracranial operations for common head injuries. For most organ injuries, there are ample high quality illustrations of several different techniques currently used to manage such an injury. This is one of the best qualities of this text because most surgeons prefer to know several available options that can be used. The text descriptions are brief but explain the essential details of each operation, including the type of suture that should be used. This basic information is often overlooked in many texts but is important for the young surgical resident with limited operative experience.

The book's major deficiency is the lack of information on intrathoracic trauma. This is surprising because the editors included a chapter on intracranial operations, which are much less likely to be performed by a general surgeon than an emergency thoracic operation (ie, penetrating cardiac wound or great vessel injury). There is sparse discussion of cardiac injuries and little information on lung or diaphragmatic injuries. Particularly disappointing is the discussion of vascular injuries of the thoracic inlet (Zone 1). A surgeon faced with operating on a patient with a penetrating injury to the innominate artery would find little information.

This atlas is well suited for surgical residents who need a quick reference that summarizes the essential features of operative trauma management, particularly when they are covering the emergency room and time to read is minimal. This book is also an excellent reference for the practicing surgeon who has only limited experience with traumatic injuries and is suddenly faced with operating on a seriously injured patient and referral to a major trauma center is not an option. Overall, I highly recommend this textbook to all surgeons who operate on trauma victims.

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The cytokine handbook, 3rd ed
Angus Thomson; San Diego; 1998; Academic Press; 1017 pages; $125.00.

Cells talk to each other. They make both local (cytokine-mediated) and long distance (hormonally mediated) calls. Should vascular surgeons eavesdrop? Will vas-
cular surgeons benefit from a Berlitz course in cellular talk? This course is currently offered in the form of the readable and comprehensive volume *The cytokine handbook*.

Cytokines are regulatory proteins transiently released from white blood cells, smooth muscle cells, and endothelial cells that provide local immune, inflammatory, or growth signals by binding to cell surface receptors on the target cell. This is a mouthful, but these signaling molecules play a huge role in vascular disease.

For surgeons not directly immersed in cytokine research, keeping up with the cytokine nomenclature is confusing and the intellectual equivalent to trying to drink water from an open fire hydrant. More than 150 cytokines have now been cloned. Each cytokine exhibits multiple functions. However, most are named after their first identified function (often not their dominant function). For example, tumor necrosis factor (TNF) was initially identified as inducing necrosis of sarcomas in mice. Now, it has become clear that TNF can inhibit and enhance cell growth, in addition to inducing cell death (apoptosis). It also modulates cell metabolism, differentiation, and even stimulates angiogenesis. Of interest to vascular surgeons, TNF also promotes local inflammation and anti-TNF antibodies have reduced brain injury in experimental models of stroke. Thus, the cytokine language is dynamic, even chaotic, because new proteins are named daily, but the meaning (biological purview) of those named changes.

Both aneurysmal disease and atherogenesis are now acknowledged to derive from a combination of local cytokine-induced dysregulation of cell proliferation. Growth factor-mediated angiogenesis is a fertile area of investigation for critical limb ischemia. Vascular surgeons are in a unique position to deliver cytokine and anti-cytokine agents directly into the endovascular compartment.

*The cytokine handbook* does a nice job of telling vascular surgeons more than we need (or want) to know about the current state of cytokine research. This is no small job because the field is exploding. However, the editor's commitment to rapidly update new additions to keep up has been realized. Each chapter has more than 100 references, and many are as recent as 1997. The text can be confusing because the cytokine nomenclature is littered with abbreviations.

However, the book is well organized, making it is easy to skip around. Each interleukin is discussed in individual chapters. The interferons, TNF, white cell stimulating factors, and growth factors are also individually discussed. The text begins with a nice overview of cytokines and concludes with chapters on anti-cytokine therapy, cytokine gene therapy, and cytokines/cytokine receptors as therapeutic targets. We are entering into an era in which vascular surgeons can be expected to establish big interstate vascular highways with grafts and then promote the proliferation of capillary back roads with either inflammatory cytokines or growth factors. For the 21st century academic vascular surgeon, *The cytokine handbook* should become a logical companion to the standard vascular surgical textbook.

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Who Is John Galt? I decided finally to read Atlas Shrugged after seeing that question go "viral" with the release of the movie. What does it mean? Then there are crony capitalists such as James Taggart and Orren Boyle, who are working with the government for their own personal gain, and characters like Hank Rearden, who spent most of his life creating a new metal that's stronger and lighter than anything currently seen. Since the book is so big, it can be an effective weapon to smack a socialist across the side of the head. The ATLAS detector at the LHC covers nearly the entire solid angle around the collision point. It consists of an inner tracking detector (ID) surrounded by a thin superconducting solenoid, electromagnetic and hadronic calorimeters, and a muon spectrometer composed of three large superconducting toroid magnets and precision tracking chambers. ATLAS uses a right-handed coordinate system with its origin at the nominal interaction point (IP) in the centre of the detector and the z-axis along the beam pipe. The x-axis points from the IP to the centre of the LHC ring, and the y-axis points upwards. Cylindrical coordinates \((r, \phi)\) are used in the transverse plane, \(\phi\) being the azimuthal angle around the z-axis. A detailed and highly illustrated approach to the teaching of operative approaches and management of a trauma patient. There is a visual emphasis upon the anatomic exposure and the individual steps of the procedure leading to definitive repair. KEY FEATURES: Large Format Atlas of Trauma Surgery. Benefits: Techniques are clearly presented and easy to follow. Contributors. Figure 8.3.5: Yield locus/surface in three dimensional stress-space. Some points, A, B, C in stress space and their projections onto the \(\pi\) plane are also shown. Also shown is some point D on the \(\pi\) plane.