
General Acknowledgments

Each year we are fortunate to receive the input of thousands of medical students and graduates who provide new material, clarifications, and potential corrections through our website and our collaborative editing platform. This has been a tremendous help in clarifying difficult concepts, correcting errata from the previous edition, and minimizing new errata during the revision of the current edition. This reflects our long-standing vision of a true, student-to-student publication. We have done our best to thank each person individually below, but we recognize that errors and omissions are likely. Therefore, we will post an updated list of acknowledgments at our website, www.firstaidteam.com/bonus/. We will gladly make corrections if they are brought to our attention.

For submitting contributions and corrections, many thanks to Ra'ed Ababneh, Lana Abusalem, Perla Acevedo, Hanan Aghar, Julie Ahlqvist, Huzaiifa Ahmad, Rija Ahmad, Mohammed Osama Sobhi Fahmi Alalfi, Abdulrhman Alghamdi, Majed Alghamdi, Mohammad Aljomaa, Syeda Akila Ally, Alameen Alsabbah, Asham Alsalkhadi, Hamzeh Feras Attallah Alshahwan, Zaid Alwarawra, Hamed Alzatary, Caroline Amakove, Roberto Andrade, Akanksha Reddy Annadi, Ali Arafa, Meliksah Arslan, Stephanie Asdell, Ahmed Y Azzam, Amir Bagheri, Charlotte Banayan, Johnny Barba, Tal Bavli, Hershey Bhagat, Saeed Bhuiyan, Pavit Bhullar, William Bloom, Zachary Brannan, Rachel Branning, Olena Budarina, Jessica Budiselic, Kevin Budziszewski, Sundas Butt, Gabriela Maria Calderon, Aparna Chaudhary, Sana Chaudhry, Amara Cheema, Kevin Cheng, Hye Rhee Chi, Akshit Chitkara, Jong Hyun Choi, Matthew J. Christensen, Columba Chukwuka, Marissa Contento, Andrew Cuevas, Sushil Dahal, Jonathan Daou, Harrison Davis, Lucia Dominguez, Manasa Dutta, Hassan El Jesr, Stylianos Elemes, Diana Espinal, Mohammad Mahdi Fanaeian, Nardin Farag, Travis Blake Fenlon, Katelyn Fiehler, Heather Finlay-Morreale, Kristina Flores, Katy Franks, Louna Ftouni, Dhir Gala, Abubakar Gapizov, Manuel Emiliano Quiroga Garza, Nicolas Curi Gawlinski, Grace Gilbert, Guilherme Gonçalves, Jan Andre Grauman, Mohit Gupta, Karl Habashy, Jeries Halaseh, Abdelrahman Adel Hamdy, Mohammad Hammouri, Lina Han, Tarek Harb, Cassandra Heaney, David Eugenio Hinojosa-Gonzalez, Taylor Hood, Sarah Hossain, Yizhou Hu, Ali Hyder, Giannis Iona, Sinan Ince, Godstime Isi Irabor, Beck Jacobsen, Chloe Jensen, Davit Kalmakhelidze, Melina Kanji, Nivedita Kar, Boran Katunaric, Azmeer Khamisani, Asim Khan, Asim Khanfar, Aqsa Kibria, Stephany Kim, Amandeep Kloti, Jayakrithi Krishnan, Karan Kumar, Nimisha Kumar, Rakesh Kumar, Natalie LaBossier, Megan Lane, Timothy Law, Lexi Lerner, Cullen Lilley, Gregory Lombana, Andrea Lorenzi, Ana-Mihaela Lupan, Divya Madhavarapu, Freda Quimba Malanyaon, Yael Mayer, John Mayfield, Jose Antonio Meade, Mario Mekhail, Ani Mepharichvili, David Merkle, Yair Miller, Saima Mirza, Sarim Mirza, Mahmoud Mohamed, Megan Moore, Andrew Moya, Sakthi Murugan, Shamsun Nahar, Akshdeep Singh Narula, Kathy Naylor, Banafsheh Nazari, Ahmed Noor, Michael Nyuyen, Maureen Oluchukwu Okafor, Vasily Ovechko, Laura Palm, Harshita Pasupuleti, Divya Patel, Malav Patel, Neha Patel, Neil Patel, Dmytro Pavlenko, Richard Pellegrini, Samantha Perobski, Gabrielle Pierce, Fanny Pimentel, Denise Powell, Carl Provenzano, Yochitha Pulipati, Sulav Pyakurel, Laith Rahabneh, Suleiman Abou Ramadan, Sachit Regmi, Rafey Rehman, Kelsey Reinsch, A. Ritchie, Tim Rosencrans, Majd Rubaeih, Ali Sabbagh, Khaled Saed, Amitoz Saini, Ayman Salih, Madison Sands, Cindy Santana, Jomar N. Machuca Santiago, Jonathan Schwiger, Congzhou Sha, Tarif Shaaban, Fathima Shaik, Manisha Sharma,

Tina Sharma, Daniel Shostak, Naomi Siddiquee, Christina Siems, Claudia Siniakowicz, Bryn Smith, John Solomon, John Spikes II, Varshini Sridhar, Joshua St. Louis, Jaqueline Stoutin, Trel Stroud, Mustafa Subhi, Sangitha Rani Suggurthi, Hafsa Omer Sulaiman, Saranya Sundaram, Siri Swarna, Asterios Symeonidis, Hamza Tariq, Narciso Rafael Torres, Rafael Torres, Sava Turcan, Muhammad Umair, Sheela Vaswani, Barat Venkataramany, Natasha Venugopal, Jeltsina Sosa Victorio, Matthew Walsh, Kaystin Weisenberger, Maria Jose Hernandez Woodbine, Lucy Wu, Xiaomei Wu, Saif Mohammad Yahia Yamin, Phillip Yang, Hafsa Yaseen, Hsinyu Yin, Susan Yohannan, and Michelle Zhu.