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These articles focus on topics that are specifically germane to FITs and early career cardiologists, and carry a maximum of 1,500 words and no more than three authors. The submissions must be substantive, engaging in hard-hitting topics. In terms of style, they must be formal in their presentation, as these are not blogs, and include citations (if relevant). We would encourage specificity when choosing a topic on which to write, as opposed to something that is too broad. All authors must be within 7 years of medical training. Please note that these articles will be reviewed and may be rejected by the JACC Editors. This content should now be submitted online at https://www.jaccsubmit.org.

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Cover Letter: A short paragraph telling the editors why the authors think their paper merits publication may be included in the cover letter. Potential reviewers may be suggested in the cover letter, as well as reviewers to avoid. However, final reviewer assignment is determined by the editors. Rebuttal Letter (revisions or appeals only) Manuscript file (see individual manuscript types and Manuscript Content for specific formatting, and you may also email jacc@acc.org for a template on how to format your submission) The entire manuscript (including tables) should be uploaded as a Microsoft Word document, with 1-inch margins and 12-point Times New Roman font. The title and abstract pages, including keywords and abbreviations, should be single-spaced. All text from the introduction to the end (including tables) should be double-spaced. Page numbering should start with the title page. Page 1: Title page: See also Manuscript Content, below Page 2: Abstract, Condensed Abstract, Key Words, Abbreviations list Text Perspectives: Core Clinical Competencies and Translational Outlook implications (on a separate page after the conclusions, and only for Original Investigation submissions) OR Highlight bullet points (for review articles only) References Figure titles and captions, including a title and caption for the Central Illustration (if applicable) Tables, each on a separate page Figures Supplemental material

Please upload all online materials, with the exception of videos, as one separately uploaded Word document, labeled Online Appendix. This should include all supplemental text, tables and figures, figure legends, etc.

MANUSCRIPT CONTENT
The order in which these items appear should also be the order in which they appear in your submission.

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Abstract
Provide a structured abstract of no more than 250 words for Original Investigations, presenting essential data in 5 paragraphs introduced by separate headings in the following order: Background, Objectives, Methods, Results, Conclusions. All data in the abstract also must appear in the manuscript text or tables. For general information on preparing structured abstracts, see “Haynes RB, Mulrow CD, Huth EJ, Altman DG, Gardner MJ. More informative abstracts revisited. Ann Intern Med 1990;113:6976.”
An unstructured 150-word abstract should be provided for either type of review article.

Keywords
Immediately after the abstract, provide a maximum of 6 key words, using American spelling and avoiding general and plural terms and multiple concepts (avoid, for example, ‘and’, ‘of’). Be sparing with abbreviations. These key words will be used for indexing purposes, and therefore should be different than the terms/words already used in the title of the paper.

Abbreviations
Up to 10 abbreviations (eg, ECG, PTCA, CABG) or acronyms (GUSTO, SOLVD) may be listed. On a separate page following the abstract, list the selected abbreviations and their definitions (eg, TEE # transesophageal echocardiography). The editors will determine which lesser-known terms should not be abbreviated. Consult “Recommendations for the Conduct, Reporting, Editing and Publication of Scholarly Work in Medical Journals (ICMJE Recommendations)” for appropriate use of units of measure.

Text
Use Times New Roman 12-point font. The text should be structured as: Introduction, Methods, Results, Discussion, and Conclusions. Use headings and subheadings in the Methods, Results, and, particularly, in the Discussion sections. Every reference, figure, and table should be cited in the text in numerical order according to order of mention.

Clinical Perspectives
The authors should delineate clinical competencies and translational outlook recommendations for their manuscripts. These competencies should not restate the questions underlying the work but describe the implications of the study and how the new information can be integrated into current practice based on the 6 domains delineated by the Accreditation Council on Graduate Medical Education (ACGME) and adopted by the American College of Cardiology Foundation (ACCF). These should be listed in the manuscript after the text and before the references. Please review the examples provided below. The competencies describe the implications of the study for current practice. The translational outlook places the work in a futuristic context, emphasizing directions for additional research.

Clinical Competencies
Competency-based learning in cardiovascular medicine addresses the 6 domains promulgated by the ACGME and endorsed by the American Board of Internal Medicine (Medical Knowledge, Patient Care and Procedural Skills, Interpersonal and Communication Skills, Systems-Based Practice, Practice-Based Learning, and Professionalism) (http://www.acgme.org/acgmeweb). The ACCF has adopted this format for its competency and training statements, career milestones, lifelong learning, and educational programs. The ACCF also has developed tools to assist physicians in assessing, enhancing, and documenting these competencies (http://www.acc.org/education-and-meetings/products-and-resources/competencies). Authors are asked to consider the clinical implications of their report and identify applications in one or more of these competency domains that could be used by clinician-readers to enhance their competency as professional caregivers. This applies not only to physicians-in-training, but to the sustained commitment to education and continuous improvement across the span of their professional careers.

Translational Outlook
Translating biomedical research from the laboratory bench, clinical trials, or global observations to the care of individual patients can expedite discovery of new diagnostic tools and treatments through multidisciplinary collaboration. Effective translational medicine facilitates implementation of evolving strategies for prevention and treatment of disease in the community. The Institute of Medicine identified 2 areas needing improvement: testing basic research findings in properly designed clinical trials and, once the safety and efficacy of an intervention has been confirmed, more efficiently promulgating its adoption into standard practice (Sung NS, Crowley WF, Genel M. The meaning of translational research and why it matters. JAMA 2008;299:3140-8). The National Institutes
of Health (NIH) has recognized the importance of translational biomedical research, emphasizing multifunctional collaborations between researchers and clinicians to leverage new technology and accelerate the delivery of new therapies to patients (http://www.ncats.nih.gov/about/about.html). Authors are asked to place their work in the context of the scientific continuum, by identifying impediments and challenges requiring further investigation and anticipating next steps and directions for future research.

**Clinical Trials**

**EXAMPLE 1:** For a Clinical Trial [N Engl J Med 2012;367:2375-84]:

**PERSPECTIVES**

**Competency in Medical Knowledge:** CABG surgery is the preferred method of revascularization for patients with diabetes and multivessel coronary artery disease.

**Competency in Patient Care:** The diabetic patient with coronary symptomatology, prior to the diagnostic catheterization, should be made aware that if multivessel disease is identified and intervention is indicated, surgical consultation should be entertained.

**Translational Outlook 1:** Although this is a relatively short-term study (median of 3.8 years), longer-term follow up of FREEDOM will lead to better understanding of the comparative benefit by CABG, specifically on mortality.

**Translational Outlook 2:** Compliance to medication is nonsatisfactory in patients with coronary artery disease. Comparing the compliance of FREEDOM patients taking a "polypill" approach (including aspirin, statin, and an angiotensin-converting enzyme inhibitor) with the compliance of patients treated conventionally with individual agents should be undertaken.

**Translational Science Studies**

**EXAMPLE 2:** For a Translational Science Study [Nat Med 2014;20:215-9]:

**PERSPECTIVES**

**Competency in Medical Knowledge:** Inflammation is one of the major determinants of atherosclerotic plaque instability. Positron emission tomography with F18-labeled FDG has been employed for the identification of the macrophages in high-risk patients. Imaging with mannose, the isomer of glucose, may have an advantage because a subset of macrophages in high-risk plaques develop mannose receptors.

**Translational Outlook 1:** Although circulating biomarkers of inflammation, such as hs-CRP, provide reliable information of systemic inflammation, detection of inflammation at the plaque level may allow identification of the high-risk plaques.

**Translational Outlook 2:** Plaque imaging with sugars, although feasible, must in a randomized fashion investigate whether treatment of individual high-risk plaques would favorably influence major adverse outcomes in atherosclerotic disease.

**Review Article**

**EXAMPLE 3:** For a Review Article [Lancet 2014;383:955-62]:

**PERSPECTIVES**

**Competency in Medical Knowledge 1:** Selection of antithrombotic therapy for prevention of thromboembolism in patients with atrial fibrillation must consider several clinical factors, including the patient’s values and preferences.

**Competency in Medical Knowledge 2:** The oral direct thrombin inhibitor, dabigatran, and factor Xa inhibitors, rivaroxaban, apixaban, and edoxaban (so-called novel oral anticoagulants or NOACs) avoid the dietary restrictions and need for routine coagulation monitoring that are cumbersome aspects of anticoagulation with vitamin K antagonists such as warfarin.

**Competency in Patient Care:** All 3 NOACs currently approved for clinical use in the United States represent advances over warfarin because of their more predictable pharmacological profiles, fewer drug interactions, and considerably lower risk of intracranial bleeding than warfarin, but these advantages come at greater monetary cost, and there is presently no approved antidote or validated strategy rapid reversal of anticoagulation induced by any of the NOACs.

**Competency in Interpersonal & Communication Skills:** It is important to discuss the available options with patients who are candidates for the newer agents.

**Translational Outlook 1:** The mechanism by which each of the NOACs evaluated to date cause less intracerebral hemorrhage than well-managed warfarin anticoagulation requires further investigation.

**Translational Outlook 2:** Additional research is needed to understand the safety and efficacy of the NOACs, alone or in combination with patients with mechanical prosthetic heart valves to overcome the toxicity of this type of anticoagulation in the limited studies undertaken to date that contraindicate their use in patients who have undergone heart valve replacement with mechanical prostheses.
REFERENCES
Identify references in the text by numerals in parentheses on the line. The reference list should be double-spaced on pages separate from the text; references must be numbered consecutively in the order in which they are mentioned in the text. List all authors if 6 or fewer, otherwise list the first 3 and add “et al.” Do not use periods after author initials. Do not cite personal communications, manuscripts in preparation, or other unpublished data in the references; these may be cited in the text in parentheses. Do not cite abstracts that are older than 2 years. Identify abstracts by the abbreviation “abstr” in parentheses. If letters to the editor are cited, identify them with the word “letter” in parentheses. Websites must be cited as references. Use Index Medicus (National Library of Medicine) abbreviations for journal titles. It is important to note that when citing an article from the *Journal of the American College of Cardiology*, the correct citation format is *J Am Coll Cardiol*.

Use the following style and punctuation for references:
Periodical. Do not use periods after the authors’ initials. Please provide inclusive page numbers:
Example: "5. Glantz SA. It is all in the numbers. J Am Coll Cardiol 1993;21:835-7." DOI-based citation for an article in press:

FIGURE LEGENDS
Figure legends should be an in-depth explanation of each figure, including a figure TITLE and a CAPTION that includes the purpose of the figure, and brief method, results, and discussion statements pertaining to the figure. All abbreviations used in the figure should be identified either after their first mention in the legend or in alphabetical order at the end of each legend. All symbols used (arrows, circles, etc.) must be explained. Target length should be 50-100 words per figure, with the title no more than 10 words. Legends should not exceed 150 words.
All figures must have a number, title, and caption. Figures should be cited in numerical order in the text with each figure called out individually, rather than using a range (for instance, Figures 1, 2, and 3, rather than Figures 1-3). Supplemental figures should be cited as “Online Figure 1, Online Figure 2,” etc. Figure titles should be short and followed by a 2 to 3 sentence caption. Your Central Illustration, if not an existing figure, should be listed last. If the figure has been previously published, cite the figure source in the legend.

TABLES
Each table should be on a separate page, with the table number and title centered above the table and explanatory notes below the table. Use Arabic numbers. Table numbers must correspond with the order cited in the text. Tables should be self-explanatory, and the data presented in them should not be duplicated in the text or figures.
All tables must have a title of up to 15 words. Each table may include a caption of up to 100 words. Abbreviations, which do not count toward the caption word limit, should be listed in a footnote under the table in alphabetical order. Footnote symbols should use lowercase, superscript letters, in alphabetical order: a, b, c, etc. If previously published tables are used, written permission from the original publisher (or copyright holder, if not the publisher) is required. Cite the source of the table in the footnote.
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**FIGURES**

Figures and graphs should be provided in TIF format. Color and gray-scale images must be at least 300 DPI. Line art should be at least 1,200 DPI. All abbreviations used in the figure should be identified in alphabetical order at the end of each legend. All symbols used (arrows, circles, etc.) must be explained. Figure legends should be double-spaced on pages separate from the text. Figure numbers must correspond with the order in which they are mentioned in the text. If previously published figures are used, written permission from the original publisher (or copyright holder, if not the publisher) is required. See STM Guidelines for details: https://www.stm-assoc.org/intellectual-property/permissions/permissions-guidelines/. If the figure has been previously published, cite the figure source in the legend. Do not include trial logos in figures.

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**SUPPLEMENTAL MATERIAL**

Supplemental material should be essential to the understanding and interpretation of the primary manuscript, and should contain original content that has not been previously published. The supplemental material will be posted online at the same time of publication of the article.

Please upload all supplemental materials, with the exception of videos and large data sets (see below), as one separately uploaded Word document that is labeled “Supplemental Appendix.” The pages of the Supplemental Appendix should be numbered consecutively. The first page of the Supplemental Appendix should list the title and page number of each element included in the document.

The Supplemental Appendix document may include the following elements: Supplemental methods Supplemental results Supplemental tables (eg, Supplemental Table 1, Supplemental Table 2) Supplemental figures with accompanying figure legends (eg, Supplemental Figure 1, Supplemental Figure 2) All references that are cited within supplemental material should be placed in a separate reference section that is at the end of the supplemental material. The references should be formatted just as in the main manuscript and numbered and cited consecutively in the Supplemental Appendix.

All supplemental material will undergo editorial and peer review at the same time as the main manuscript is being evaluated. **Once the manuscript is accepted for final publication, the content of the supplemental material cannot be changed.**
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Large data sets for gene expression microarrays, SNP arrays, and high-throughput sequencing studies should be deposited in a public data repository (1,2). Microarray data must be deposited in a public data base that is compliant with Minimum Information About a Microarray Experiment (MIAME) guidelines (eg, GEO). High-throughput sequencing data must be deposited in a public data base that is compliant with Minimum Information About a Next-generation Sequencing Experiment (MINSEQE) guidelines. Please provide the relevant accession numbers in the text of the main manuscript. Wheeler DL, Barrett T, Benson DA et al. Database resources of the National Center for Biotechnology Information. Nucleic Acids Res 2007;35:D5-12. Edgar R, Barrett T. NCBI GEO standards and services for microarray data. Nat Biotechnol 2006;24:1471-2.

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Studies should be in compliance with human studies committees and animal welfare regulations of the authors’ institutions and the U.S. Food and Drug Administration guidelines. Human studies must be performed with the subjects’ written informed consent. Authors must provide the details of this procedure and indicate that the institutional committee on human research has approved the study protocol. If radiation is used in a research procedure, the radiation exposure must be specified in the Methods.

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**Accept.** The manuscript is acceptable for publication in its current form. However, minor edits may be made by the JACC medical editors, illustrators, or the publisher, and authors will need to work with the appropriate contacts to ensure these changes are incorporated post-acceptance. **Minor Revision.** It is important to note that this decision does not guarantee acceptance. However, less significant edits are required than a Revision Required decision. **Revision Required.** The manuscript is unacceptable for publication in its current form. However, the editors are willing to reconsider a thoroughly revised manuscript. The authors must respond to all reviewer and editor comments and the submission will be re-reviewed and treated as a new submission. **Reject.** The manuscript is unacceptable for publication and/or is not an appropriate fit for JACC.

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Participation solely in the collection of data does not justify authorship but may be appropriately acknowledged in the Acknowledgment section. Authors must also agree to the following statements. These questions will be part of the submission process and manuscripts will not be reviewed until they are confirmed: 1) the paper is not under consideration elsewhere; 2) none of the paper's contents with the exception of abstracts or preprint publications meeting journal requirements have been previously published; 3) all authors have read and approved the manuscript; 4) agreement to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved; 5) the full disclosure of any relationship with industry (see "Relationship with Industry Policy") or that no such relationship exists, is stated; and 6) the authors have provided both a central illustration and the perspectives (original research articles) or main messages (review articles). Exceptions must be explained.

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Data Visualization Guidelines

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**Use of inclusive language**

Inclusive language acknowledges diversity, conveys respect to all people, is sensitive to differences, and promotes equal opportunities. Content should make no assumptions about the beliefs or commitments of any reader; contain nothing which might imply that one individual is superior to another on the grounds of age, gender, race, ethnicity, culture, sexual orientation, disability or health condition; and use inclusive language throughout. Authors should ensure that writing is free from bias, stereotypes, slang, reference to dominant culture and/or cultural assumptions. We advise to seek gender neutrality by using plural nouns ("clinicians, patients/clients") as default/wherever possible to avoid using "he, she," or "he/she." We recommend avoiding the use of descriptors that refer to personal attributes such as age, gender, race, ethnicity, culture, sexual orientation, disability or health condition unless they are relevant and valid. When coding terminology is used, we recommend to avoid offensive or exclusionary terms such as "master", "slave", "blacklist" and " whitelist". We suggest using alternatives that are more appropriate and (self-) explanatory such as "primary", "secondary", "blocklist" and "allowlist". These guidelines are meant as a point of reference to help identify appropriate language but are by no means exhaustive or definitive.

**Reporting sex- and gender-based analyses**

**Reporting guidance**

For research involving or pertaining to humans, animals or eukaryotic cells, investigators should integrate sex and gender-based analyses (SGBA) into their research design according to funder/sponsor requirements and best practices within a field. Authors should address the sex and/or gender dimensions of their research in their article. In cases where they cannot, they should discuss this as a limitation to their research's generalizability. Importantly, authors should explicitly state what definitions of sex and/or gender they are applying to enhance the precision, rigor and reproducibility of their research and to avoid ambiguity or conflation of terms and the constructs to which they refer (see Definitions section below). Authors can refer to the Sex and Gender Equity in Research (SAGER) guidelines and the SAGER guidelines checklist. These offer systematic approaches to the use and editorial review of sex and gender information in study design, data analysis, outcome reporting and research interpretation - however, please note there is no single, universally agreed-upon set of guidelines for defining sex and gender.

**Definitions**

Sex generally refers to a set of biological attributes that are associated with physical and physiological features (e.g., chromosomal genotype, hormonal levels, internal and external anatomy). A binary sex categorization (male/female) is usually designated at birth ("sex assigned at birth"), most often based solely on the visible external anatomy of a newborn. Gender generally refers to socially constructed roles, behaviors, and identities of women, men and gender-diverse people that occur in a historical and cultural context and may vary across societies and over time. Gender influences how people view themselves and each other, how they behave and interact and how power is distributed in society. Sex and gender are often incorrectly portrayed as binary (female/male or woman/man) and unchanging whereas these constructs actually exist along a spectrum and include additional sex categorizations and gender identities such as people who are intersex/have differences of sex development (DSD) or identify as non-binary. Moreover, the terms "sex" and "gender" can be ambiguous—thus it is important for authors to define the manner in which they are used. In addition to this definition guidance and the SAGER guidelines, the resources on this page offer further insight around sex and gender in research studies.

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