FORTHCOMING IN *Journal of Clinical Anatomy*

Media Review
Bonnie Spring, Arlen C. Moller, and Holly Falk-Krzesinski.
***Teamscience.net*. Northwestern University, 11 Apr. 2011.**
Web. <http://teamscience.net/>.
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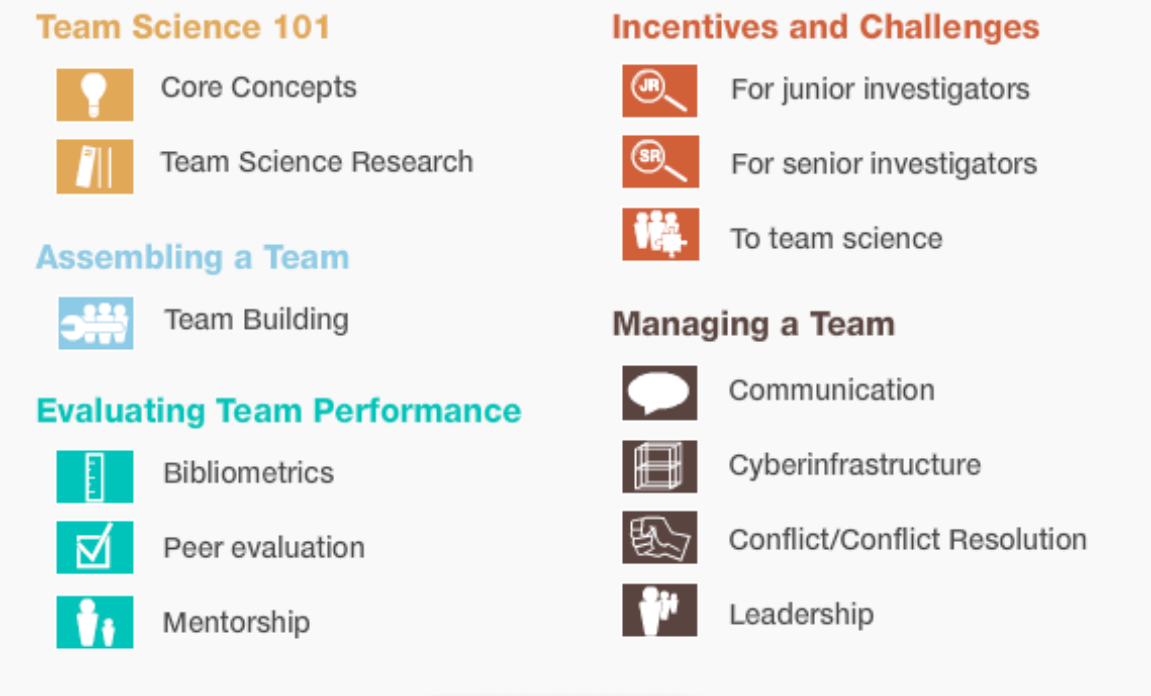
The website <http://www.teamscience.net> adds to a growing number of online resources for the emerging interdiscipline of Science of Team Science (SciTS). Created by Bonnie Spring, Arlen C. Moller, and Holly Falk-Krzesinski, this open-access site aggregates authoritative definitions, guidelines, best practices, and resources aimed at leveraging cross-disciplinary expertise. The primary audience is comprised of researchers in biomedical sciences, including New Investigators, Senior Investigators, Research Development Officers, and even just "Someone Curious." The site is structured around four self-guided learning modules in a multi-modal presentation of texts, animations, simulations, interactive exercises, and short video interviews with experts in the SciTS network.

Careful thought has been given to the user experience. Navigation by clicking with a mouse is for the most part easy and nimble. Users can get a preliminary overview on the greeting page by clicking on three bars under TEAM SCIENCE *About, Module Descriptions*, and *Resources*. (A *Message Board* is temporarily retired.) For a more dynamic overview, register, log in, then launch the "Introduction." An avatar named Bonnie, with Spring's inviting voiceover, greets users in the foyer of a virtual Team Science Training Institute then walks them through the site after a definition of SciTS. From there, four interactive wings and their rooms may be explored sequentially or randomly.

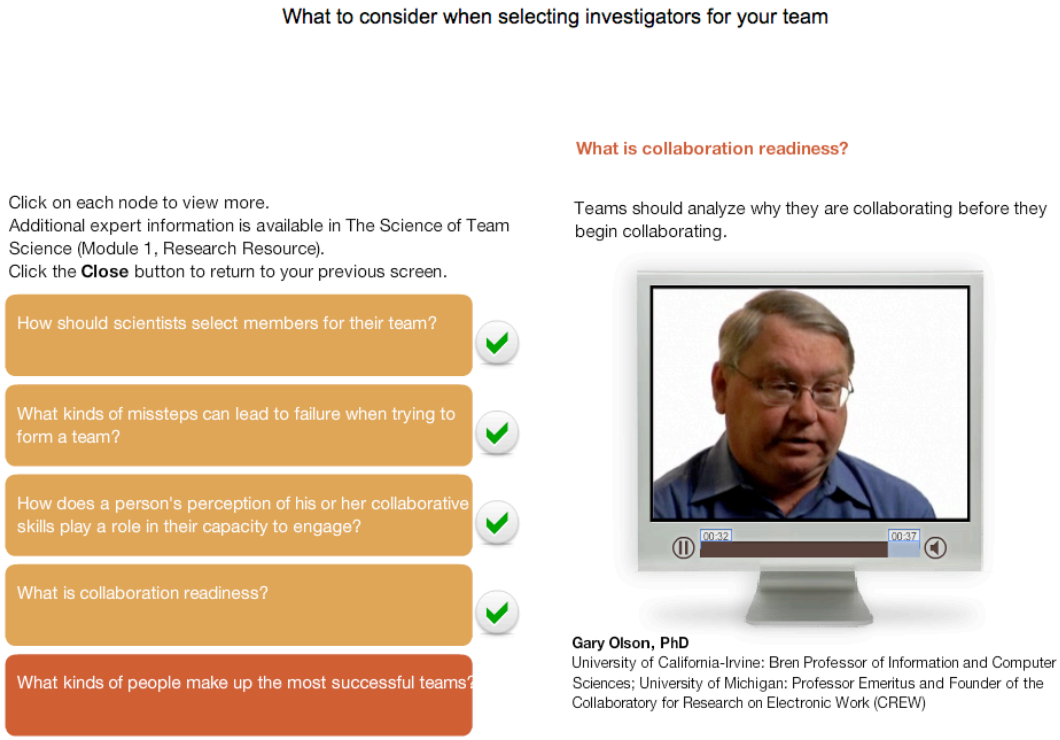
Module 1: The Science of Team Science: Research Resource
The best way to get a sense of this foundational unit is to click on the Module Outline in the right-hand Resources box, producing links to all FAQs (also accessible on the expanded "Ask the Expert" link, below). Section #1: *Team Science 101* presents core concepts and resources. #2: *Incentives and Challenges* addresses the generic needs of team science and the particular needs of senior and junior investigators. #3: *Assembling A Team* focuses on team building, including collaboration readiness and cognitive factors. #4: *Managing A Team* includes subtopics of communication, leadership, cyberinfrastructure, and conflict/conflict resolution. #5: *Evaluating Team Performance* covers peer evaluation and bibliometrics. Together, these sections provide common ground for understanding trendlines, terminology, appropriateness and types of teams, communication, collaboration, leadership, stages, skills, typical challenges, incentives, costs and risks, benefits and rewards. Module 1 also introduces valuable but hitherto dispersed resources such as the Team Science Field Guide, the Team Science Toolkit, and the Collaboration Success Wizard.

The meaning of icons is not clear initially, resulting in potential confusion if starting at the obvious beginning of point of Team Science 101. Users might also forget their meanings in subsequent modules, since they are combined per topic. A Key is available, however, in All Topics and here for handy reference:



Images published with permission from B. Spring, A. Moller, and H. J. Falk-Krzesinski, COALESCE, the CTSA Online Assistance for Leveraging the Science of Collaborative Effort**.**
Northwestern University, 2011.

Module 2: **Behavioral Science Team Wing**
Module 2 is angled toward a Senior Investigator pursuing a program project grant (a P-01 at the National Institutes of Health). Clicking on the Module Outline produces an alternative navigation route with key topics and related questions. After LAUNCH, an introductory Dossier frames a multilevel project on "Unhealthy Eating Habits in Adult Obesity" with three studies: Environmental Food Cues, Neuroimaging, and Social Network. Users can then navigate the rooms and their topics: #1: *Forming a Team* (including selection of members and collaboration readiness, #2: *Identifying Funding and Proposal Submission (*e.g., preparing a proposal and budget), #3: *Project Kick-off* (e.g., communication building, collaborator agreements, face-to-face meetings and cyberinfrastructure), #4: *Managing the Team (*e.g., conflict and unresponsiveness), and #5: *Evaluating Success Mid-Project* (although "metrics" is a narrow term for the range of quantitative and qualitative approaches covered).



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Module 3: Biomedical Team Science Wing
The angle is a Research Development Officer (RDO) facilitating a large Center grant. Once again, click on the Outline for an overview then move through the four rooms by clicking on a designated sequence of glowing objects: #1: *Initiating the Project, #2: Developing the Proposal and Budget*, #3: *Developing a Relationship with a Funder/Program Officer*, and #4: *Promoting Collaboration*. The wing incorporates pertinent strategies for working with funders, selecting investigators, drafting budgets, facilitating communication, using cyberinfrastructure, and transitioning from the RDO to the PI. The wisdom of experience that characterizes much of this site is amply evident in inclusion of not only best practices but also potential mistakes and common pitfalls.

Module 4 Clinical Medicine Team Science Wing
The angle is a Junior Investigator completing a collaborative R01 grant. The rooms are #1: *Assembling the Team and Developing Team Leadership*, #2: *Team-Building Activities*, #3: *Managing Conflict Upward and Downward*, #4: *Sustaining Team Engagement and Communication*, and #5: *Evaluating Team vs. Individual Success*. While moving through designated objects, users explore topics of leadership, funding stages, authorship, incentives, motivation and engagement, tenure and promotion, and a team-building activity called the "Toolbox" Approach (featured at the forthcoming SciTS conference: http://scienceofteamscience.northwestern.edu/scits-2012-conference). As with Modules 2 and 3, interactive exercises match particular approaches and phenomena, sharpening understanding of appropriate strategies.

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The design of <teamscience.net> integrates linear approaches from the print world with Web 2.0 technology that fosters the associational and interactive style of contemporary online learning. This combination fosters making optional choices, not simply passive receiving of pre-determined answers. While working through separate sections of Module 1, the Library also remains accessible with its stockpile of references, websites, professional organizations, and conferences/workshops. Within modules, pop-up windows and the Learn More button also make quick answers to pertinent questions available immediately, without being exited from a module. And, teams and individuals can use the site as a formal training course, with post self-assessments to track their progress and even qualify for a Certificate of Completion. Or, they can access modules selectively for informal coaching and work at individual paces.

The <teamscience.net> website does not escape the challenges of timeliness and sustainability faced by all digital aggregations. Some typos, text overwrites, and dead-ends also appear, but very few. Moreover, the design team has arranged for some updates, and solicits online evaluations to improve user experience. There is no universal formula for Team Science. However, the availability of a single gateway to the knowledge base with unprecedented breadth represents a major advance for the field of SciTS.