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A Pharmacology-Based Enrichment Program for Undergraduates Promotes Interest in Science
Elizabeth A. Godin, Stephanie V. Wormington, Tony Perez, Michael M. Barger, Kate E. Snyder, Laura Smart Richman, Rochelle Schwartz-Bloom, and Lisa Linnenbrink-Garcia

The authors examined the effect of an intervention (a Summer minicourse and a Fall research course) that was designed to support students' science motivation. Undergraduates improved their knowledge of biology and chemistry concepts, reported high levels of science motivation, and were likely to major in a biological, chemical, or biomedical field.

Caution, Student Experience May Vary: Social Identities Impact a Student's Experience in Peer Discussions
Sarah L. Eddy, Sara E. Brownell, Phonraphee Thummaphan, Ming-Chih Lan, and Mary Pat Wenderoth

This study found that self-reported preferred roles in peer discussions in introductory biology classrooms can be predicted by social identities and that barriers to participation in peer discussions may impact certain student groups more than others.

Cues Matter: Learning Assistants Influence Introductory Biology Student Interactions during Clicker-Question Discussions
Jennifer K. Knight, Sarah B. Wise, Jeremy Rentsch, and Erin M. Furtak

Recordings of introductory biology student discussions of clicker questions demonstrate that students use reasoning and questioning in their discussions and that their use of these discussion characteristics is heavily influenced by the cues they hear from learning assistants during discussions.

Beyond the Biology: A Systematic Investigation of Noncontent Instructor Talk in an Introductory Biology Course
Shannon B. Seidel, Amanda L. Reggi, Jeffrey N. Schinske, Laura W. Burrus, and Kimberly D. Tanner

We define a new construct termed *Instructor Talk* that may be a key mechanism for effectively implementing active learning and that may contribute to minimizing student resistance and stereotype threat, while building instructor immediacy. We used a mixed-methods approach and analyzed more than 600 instructor quotes. Presented here is a novel framework revealing the emergent categories and subcategories of the framework as well as examples of Instructor Talk.

Measuring Networking as an Outcome Variable in Undergraduate Research Experiences
David I. Hanauer and Graham Hatfull

This paper proposes, presents, and validates a simple survey instrument to measure student conversational networking. The tool covers both personal and professional social networks and may be significant for exploring issues of retention and the development of scientific literacy.

The Laboratory Course Assessment Survey: A Tool to Measure Three Dimensions of Research-Course Design
Lisa A. Corwin, Christopher Runyon, Aspen Robinson, and Erin L. Dolan

This paper presents the development and validation of the Laboratory Course Assessment Survey (LCAS), a measure of three laboratory course design features: collaboration, discovery and relevance, and iteration. Results from analysis of LCAS data indicate that it is useful for distinguishing between research courses and traditional lab courses.

Career Development among American Biomedical Postdocs

Kenneth D. Gibbs, Jr., John McGready, and Kimberly Griffin

This study reports results from a national survey examining the career development of biomedical postdocs. Findings point to the need for enhanced career development programs earlier in the training process and interventions that are sensitive to distinctive patterns of interest development across social identity groups.

The Role of Scientific Communication Skills in Trainees' Intention to Pursue Biomedical Research Careers: A Social Cognitive Analysis

Carrie Cameron, Hwa Young Lee, Cheryl Anderson, Angela Byars-Winston, Constance D. Baldwin, and Shine Chang

Scientific communication skills are indispensable for success in academic biomedical research careers, but the effort to acquire them can be formidable for trainees and their mentors. The authors investigated whether and how development of these skills affects the academic career intentions of trainees.

On the Cover

This image was captured from *The Ethics of Preimplantation Genetic Diagnosis*, an excerpt from the NOVA episode *Cracking Your Genetic Code*. The video clip explores ethical concerns raised by preimplantation genetic diagnosis, a genetic screening technique that allows for identification of disease-causing DNA mutations and other traits in embryos created via in vitro fertilization (IVF). The rapidly evolving nature of biotechnologies makes bioethics particularly amenable to the use of online resources as primary or supplemental teaching materials. In this issue's WWW.Life Sciences Education feature, Hawkins and Stark review online resources for teaching bioethics. The review includes sources for teaching ethical analysis, case studies, and content that focuses on protecting human research participants. The video excerpt and others are available online through PBS Learning Media's website. (Image credit: NOVA)