# CRLT

## Center for Research on Learning and Teaching

Promoting Excellence and Innovation in Teaching and Learning at U-M





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This report was compiled by Ryan Hudson, Matt Kaplan, Jeri Hollister, and Amy Hamermesh.

## Executive Summary

#### Overview

- CRLT celebrated its 50th anniversary with visitors from 27 campuses and 350 members of the U-M community attending talks from the President, Provost, and Senior Vice Provost, a presidential panel, theatre performance, and a gallery of teaching innovations.
- CRLT staff members provided 17,387 services to U-M and external clients, including 4,064 unique individuals at U-M (pp. 4-5). As a prominent university teaching center, CRLT also received visitors or requests for information from more than 222 colleges, universities, and organizations (pp. 7-10).
- CRLT offered a wide range of services to the U-M community, including instructor orientations, seminars, midterm student feedback (MSF) sessions, individual consultations, and publications.
- Approximately half of CRLT's work involves discipline-specific programs for U-M's 19 schools and colleges (pp. 11-21). CRLT worked especially closely with the two largest undergraduate colleges: the College of Literature, Science, and the Arts (LSA), and the College of Engineering (CoE).
- CRLT distributed more than \$330,000 in grant and award money to 105 U-M faculty through eight competitions, four of which were funded directly by CRLT (pp. 49-56).
- CRLT provided advice to 27 U-M offices and 34 teaching-related committees (p. 22).
- CRLT published a book documenting its approach to faculty development, *Advancing the Culture of Teaching on Campus: How a Teaching Center Can Make a Difference* (Stylus Publishing) (pp. 57-58).

#### Assessment and Research

- CRLT consulted on assessment of student learning with 16 U-M schools and colleges (pp. 31-37). From survey design to large-scale projects involving data collection, analysis, and facilitation of faculty exchanges, CRLT focuses on ways to use results of assessment projects for curriculum revision.
- CRLT provided MSF sessions to 393 U-M faculty and graduate student instructors (GSIs), enabling more than 14,000 U-M students to offer constructive feedback (p. 48).
- CRLT, with the Provost's co-sponsorship, ran the Investigating Student Learning grants competition for faculty interested in assessing student learning in their courses and departments (p. 32).
- CRLT staff led 8 major research projects, gave multiple conference presentations, did review and editorial work, and published numerous journal articles (pp. 57-61).

#### Instructional Technology

- CRLT played a leadership role in supporting the IT needs of faculty and GSIs through grant funding, consultations, IT seminars, and workshops in U-M's Enriching Scholarship program (pp. 28-29).
- In collaboration with the office of Instructional Technology Services, CRLT ran a learning community for faculty to explore ways of using Google Apps in their teaching (p. 29).
- CRLT developed a large-course initiative in collaboration with LSA and the College of Engineering to assist faculty in redesigning large courses to increase student engagement, with special emphasis on IT.
- CRLT, in collaboration with LSA, provided funding to 9 faculty to integrate IT projects into their courses as part of the Teaching with Technology Institute (p. 53).

#### Instructional Technology (cont.)

The CRLT website was heavily utilized by local, national, and international users, receiving over 480,000 unique visits from 214 countries (p. 28).

#### Multicultural Teaching

- Multiculturalism is an integral element of CRLT's core programming, such as orientations for academic administrators and instructors, as well as retreats and workshops for academic units (p. 29).
- In collaboration with The Program on Intergroup Relations (IGR), CRLT facilitated a faculty learning community focused on building dialogue skills for faculty teaching multicultural content (p. 29).
- A CRLT staff member chaired the University Diversity Council, and CRLT participated on four other university-wide multicultural committees.
- CRLT supported multiple faculty members and departments focusing on community-engaged teaching in their course design, pedagogical strategies, and evaluation.
- In collaboration with Rackham Graduate School and IGR, CRLT offered a six-session program that trained GSIs to be effective facilitators in multicultural classroom settings.
- The CRLT Players presented 47 performances of sketches on diversity and inclusion in teaching and faculty worklife for audiences of more than 3,400 people (pp. 30-31).

#### Initiatives for Faculty

- CRLT collaborated with the deans of seven schools and colleges to develop a new Health Sciences Teaching Academy for assistant and clinical assistant professors; it included a two-day orientation in August 2011, as well as programs in the fall and winter terms (p. 26).
- In collaboration with the LSA Dean's Office, CRLT offered a Teaching Academy for new assistant professors that included a two-day orientation, as well as programs during the fall and winter terms.
- CRLT worked with the Senior Vice Provost to organize a dinner and celebration of the 25th year of the Thurnau Professorships.
- In collaboration with the Provost's Office and the University Library, CRLT ran the fourth annual competition for the Provost's Teaching Innovation Prize (pp. 49-50).
- For the fifth year, CRLT coordinated the Provost's Campus Leadership Program, providing professional development for new and continuing department chairs and associate deans (p. 42).

#### GSI Training and Preparing Future Faculty

- CRLT provided orientation programs for new GSIs in fall and winter terms, including specialized orientations for GSIs in the College of Engineering and, in collaboration with the English Language Institute, for GSIs educated abroad in languages other than English (p. 40).
- CRLT hired and trained experienced GSIs to serve as graduate teaching consultants and engineering teaching consultants. Both groups conducted consultations and MSF sessions for GSIs (pp. 46-47).
- CRLT, in collaboration with Rackham Graduate School, continued its U-M Graduate Teacher Certificate Program. Since the program's inception in 2007, 594 graduate students from 51 graduate programs in 14 schools and colleges have enrolled in the program, and 199 have received certificates (p. 43-44).
- CRLT and Rackham continued to provide U-M graduate students and postdocs with four Preparing Future Faculty programs: a short-course for postdoctoral scholars, mentoring experiences on other campuses, a month-long seminar, and a one-day conference (pp. 44-45).

## Summary of CRLT Services

► Total Number of Services Provided  (Some individuals receive multiple services)	17,387
	15 (00
Total # of Services for U-M Clients (see tables on page 5)	15,690 7,067
* Participants in Campus-Wide Programs	7,967
* Participants in Discipline-Specific Programs for Departments, Schools, & Colleges	5,050
* Consultations	2,280
* Instructors receiving Midterm Student Feedback (MSF) Sessions	393
Total # of Services for External Clients	1,697
* Participants in External Presentations and Workshops	943
* Audience Members at External Theatre Performances	396
* Consultations and Other Services	358

Total Number of U-M Unique Individuals Served	4,168
Faculty	1,505
Postdoctoral Scholars	87
Graduate Students	1,725
Academic Administrators and Staff	616
Undergraduate Students	153
Unknown Rank	60
Alumni	22

#### Additional Information

Grant and Award Money Distributed	\$334,688
Visits to the CRLT Website	480,400
U-M Students Served by Midterm Student Feedback (MSF) Sessions	14.516

# Summary of services

#### Distribution of CRLT Services to U-M Clients (by School and College Affiliation)

U-M Clients	Total # of Individuals	Total # of Services
Architecture & Urban Planning	84	144
Art & Design	38	80
Business	82	206
Dentistry	133	370
Education	109	294
Engineering	881	2,218
Information	45	125
Kinesiology	34	114
Law	21	57
Libraries (UM)	38	164
LSA	1,447	4,092
Medical School	280	639
Music, Theatre & Dance	90	186
Natural Resources & Environment	61	178
Nursing	122	401
Officer Education	2	9
Pharmacy	78	292
Public Health	122	339
Public Policy	55	94
Rackham	4	29
Social Work	48	171
Administration	111	853
Other	145	512
U-M Dearborn	42	62
U-M Flint	21	38
Individuals, Unit Unknown	75	-
Services, Unit Unknown	-	4,023

TOTAL: 15,690 4,168

#### Distribution of CRLT Services to U-M Clients (by Rank or University Affiliation)

Rank/Affiliation	Total # of Individuals	Total # of Services
Faculty	1,505	4,446
• Full Professor	397	1,148
Associate Professor	304	1,092
<ul> <li>Assistant Professor</li> </ul>	370	1,139
• Lecturer	275	751
• Research Scientist	58	103
<ul> <li>Instructor/Adjunct/ Visiting Faculty</li> </ul>	91	187
• Faculty, Rank Unknown	10	26
Deans, Directors, Chairs	134	970
Other Administration & Staff	482	1,829
Postdoctoral Scholars	87	382
Graduate Students	1,725	3,850
Undergraduate Students	153	188
Alumni	22	26
Individuals, Rank Unknown	60	_
Services, Rank Unknown	-	3,999

TOTAL 4,168 15,690

## **CRLT History**

Founded in 1962 at the University of Michigan, the Center for Research on Learning and Teaching (CRLT) was the first teaching center in the country. CRLT is part of the Provost's Office and works with faculty, graduate student instructors (GSIs), and academic administrators in all nineteen schools and colleges to support and enhance learning and teaching at U-M. CRLT offers a comprehensive array of curricular and instructional development activities. CRLT's professional staff, with Ph.D.s in a variety of academic disciplines, provide both cross-disciplinary campus-wide programs and discipline-specific programs customized to the individual needs of departments, schools, and colleges. CRLT strives to promote a University culture that values and rewards teaching, respects and supports individual differences among learners, and encourages the creation of learning environments in which diverse students can learn and excel.

#### CRLT Faculty Advisory Board

The Faculty Advisory Board is responsible for advising the Executive Director on policies and activities that enable CRLT to fulfill its mission. Important issues include, but are not limited to, program and research objectives and priorities, grants competitions, resource procurement and allocation, national project participation, and intra-university relations. Board members play a key role as liaisons between the Center and the rest of the university community. The Advisory Board typically meets once a month during the academic year.

Michael Bastedo	Associate Professor of Higher and Postsecondary Education
Mary Blazek	Instructor in Psychiatry
Peter M. Chen	Professor of Electrical Engineering and Computer Science; Arthur F. Thurnau Professor
Cathleen Connell	Professor of Health Behavior and Health Education
Paul Conway	Associate Professor of Information
Lisa Disch	Professor of Political Science; Professor of Women's Studies
Leslie Hollingsworth	Associate Professor of Social Work
Mohammed Islam	Professor of Electrical and Computer Engineering
Andrew Kirshner	Associate Professor of Art and Design; Associate Professor of Performing Arts Technology
Daniel Klionsky	Professor of Biological Chemistry; Professor of Molecular, Cellular, and Developmental Biology; Research Professor, Life Sciences Institute
Dana Muir	Professor of Business Law; Arthur F. Thurnau Professor
Deborah Ross	Lecturer IV of Classical Studies
Susan Waltz	Professor of Public Policy

CRLT Faculty Advisory Board Members, 11-12

## External Colleges, Universities, and Organizations Served

Because of its national reputation, representatives of many other institutions contact CRLT for advice and information. In 2011-2012, CRLT provided 1,297 services to external clients who represent 165 colleges and universities, 57 associations, foundations, and other organizations in the United States and abroad (see below). Most frequently, CRLT staff provided information on topics such as how to develop a new teaching center and evaluate its programs, how to work with faculty at a research university, how to embed multicultural teaching and learning into the work of a teaching center, and requests to use CRLT publications and Web resources. Additionally, 396 individuals from outside U-M attended performances of the CRLT Theatre Program. Following are lists of the institutions and organizations that received services from CRLT.

An asterisk (\*) indicates that individuals from that institution or organization visited CRLT in Ann Arbor.

#### Colleges and Universities within the U.S.

Agnes Scott College

Albion College\*

Appalachian College of Pharmacy

Arizona State University

Bowling Green State University\*

Brown University\*

Central Michigan University\*

Columbia University\*

Concordia University (Wisconsin)

Cornell University

Curry College

Dartmouth College\*

Davenport University

Denison University

Drew University of Medicine and Science

Duke University

Eastern Michigan University\*

Elizabethtown College

**Emory University** 

Ferris State University\*

Florida International University

Georgia Institute of Technology\*

Grand Valley State University\*

Harvard University\*

Humboldt State University

Indiana University - Purdue University

Indianapolis\*

Indiana University\*

Johns Hopkins University

Kalamazoo College

Kennesaw State University\*

Kent State University

Kettering University\*

Lone Star College

Madonna University

Massachusetts Institute of Technology

(MIT)\*

Medical University of South Carolina

Michigan State University\*

Montana State University

Northeastern University

Northwestern University\*

Oakland University\*

Oberlin College & Conservatory

#### Colleges and Universities within the U.S. (cont.)

Ohio State University\*

Olin College

Pennsylvania State University\*

Portland State University
Princeton University\*
Purdue University\*
Samford University

Southwest University\*

Stanford University\*

Temple University
Texas Tech University

The New School for Social Research

University of Alabama at Birmingham

University of California, Berkeley University of California, Davis

University of California, Irvine

University of California, Los Angeles University of California, San Diego University of California, Santa Cruz

University of Chicago\*
University of Cincinnati

University of Colorado Boulder

University of Florida University of Georgia

University of Illinois at Urbana-

Champaign\*
University of Iowa\*
University of Kentucky
University of Louisville
University of Maryland

University of Maryland - Baltimore County\*

University of Massachusetts Amherst

University of Miami\*
University of Minnesota\*

University of Mississippi Medical School

University of Missouri University of Mobile

University of Nebraska at Omaha University of Nebraska-Lincoln University of New Hampshire

University of North Carolina at Chapel Hill

University of Pennsylvania University of Pittsburgh\* University of San Diego University of South Carolina\* University of South Florida

University of Tennessee, Knoxville University of Texas at Arlington University of Texas at Austin\*

University of Toledo University of Vermont University of Virginia University of Washington

University of Wisconsin-Madison University of Wisconsin-Milwaukee

Vanderbilt University

Virginia Tech\*

Wake Forest University

Washington University in St. Louis

Wayne State University\*
Wesleyan University

Western Kentucky University

Western Michigan Community College

Western Michigan University\*

Westminster College Whitworth College Yale University\*

#### Colleges and Universities outside the U.S.

Aga Khan University, Pakistan An-Najah National University, Palestine\* Beijing Film Academy, China\* Beijing Institute of Clothing Technology, China\*

Beijing Institute of Petrochemical Technology, China\*

Beijing Institute of Technology, China \* Beijing Jiaotong University, China\* Beijing Municipal Education Commission, China\*

Beijing Normal University, China\* Beijing Polytechnic College, China\* Beijing Technology and Business University, China\*

Beijing Union University, China\* Beijing University of Agriculture, China\* Beijing University of Chemical Technology, China\*

Beijing University of Civil Engineering and Architecture, China\*

Beijing University of Posts and Telecommunications, China\*

Beijing Vocational College of Electronic Science, China\*

Beijing Vocational College of Finance and Commerce, China\*

Capital Institute of Physical Education, China\*

Capital Normal University, China\*

Capital Normal University (Beijing Teachers Training Center for Higher Education), China\*

Central China Normal University\*

Central University of Finance and

Economics, China\*

China University of Mining and Technology, Beijing\*

Dalian University of Technology, China\* Fudan University, China\*

Harbin Institute of Technology, China\* Huazhong University of Science & Technology, China\* Jilin University, China\* King Faisal University, Saudi Arabia\* Loughborough University, UK Makerere University, Uganda\* McGill University, Canada Middle Eastern Technical University, Turkev\*

Mongolian University of Science and Technology

Nanjing Agricultural University, China\* Nankai University, China\* National Graduate School in Education Research (NATED), Norway\* North China University of Technology\*

Northeast Normal University, China\* Peking University, China

Ritsumeikan University Institute for Teaching and Learning, Japan\*

Shandong University, China\*

Shanghai Jiao Tong University, China\*

Tsinghua University, China\*

University Anhembi-Morumbi, Brazil\* University of Abomey-Calavi, Benin\*

University of Baghdad, Iraq\*

University of Dammam, Saudi Arabia

University of Duhok, Iraq\*

University of Electronic Science and

Technology of China\*

University of Helsinki, Finland

University of Ouagadougou, Burkina Faso\*

University of Science & Technology Beijing, China\*

University of Tromso, Norway\* Woosong University, South Korea\* Zhongnan University of Economics and Law, China\*

#### Associations, Foundations, and Other Organizations

3M

Accenture

Alcoa

American Association of Medical

Assistants Arts Alliance

American Society for Engineering

Education (ASEE)

ASEE Prism\*

Association for the Advancement of

Science (AAAS)\*

Association of American Colleges and

Universities (AAC&U)\*

Association of American Medical Colleges

Big Picture Partners BlueWater Satellite

Boeing BP

Bridgespan Group

Center for Courage and Renewal Chelsea Community Hospital Chicago Consulate of China\* Chinese Ministry of Education\* Department of International

Cooperation and Exchanges of China\* Department of National Universities of

China\*

Department of Personnel

Council of Independent Colleges (CIC)/ National Institute for Learning Outcomes

Assessment (NILOA)\*
DEGW North America

Detroit Area Pre-College Engineering

Program

Dow

Educause Exponent Focus Hope

Ford Motor Company

General Electric
General Motors

Gleaners

ΗP

Inside Higher Ed\*

Intel

John Deere

John Wiley & Sons Lockheed Martin

Mathworks\*

Medical Research Council\*

Metco Services

National Endowment for the Arts National Science Foundation (NSF)

Proctor & Gamble

Professional and Organizational Development Network in Higher

Education (POD)\*

Shell

Society for College and University

Planning

Stanger Corporation State of Michigan Stylus Publishing, LLC

Trinity Health

United States Army United States Navy

University Prep Science + Math High

School Visteon

## Discipline-Specific Services for Schools, Colleges, and Other Units at U-M



CRLT responds to units based on their particular teaching and learning needs. Services include support for assessment of student learning, customized seminars and retreats, support for unit-wide graduate student instructor (GSI) training, consultations offered to individual faculty at the request of a specific unit, and consultations with deans and chairs focusing on unit-wide activities. CRLT provided close to 5,000 services for 18 of U-M's schools and colleges, as well as 19 other units, including the President's and Provost's Offices.

#### Discipline-Specific Services for U-M Schools, Colleges, and Departments

#### **Architecture and Urban Planning**

- \* Consultations on new curriculum initiatives
- \* Grants for teaching innovation received by Hwang, Macgillivray, Moran, Ng, Tierman, and Wilkins

#### **Art and Design**

- \* Assessment of and reporting on new international experience requirement for undergraduates
- \* Grants for teaching innovation received by Modrak and Graf

#### **Business**

- \* Consultation on design of an exit survey for B.B.A. students
- \* Consultation on survey design for evaluation of Kresge Library instructional resources
- \* Consultations on developing assessment plans in preparation for upcoming accreditation visit
- \* Consultations on improvement of recruitment and retention of women faculty
- \* Design and facilitation of retreat for B.B.A. curriculum, in preparation for accreditation visit
- \* Evaluation of BA 201, involving a survey and focus groups of seniors and groups of students who took the course in Winter 2010-11
- \* Feedback on faculty and student surveys for Ross Technology Advisory Committee

#### **Dentistry**

- \* Consultation about evaluation plan for undergraduate curriculum assessment
- \* Consultation about measurement of D1 course on long-term clinical reasoning skills
- \* Design and facilitation of fall term faculty retreat on teaching and assessing critical thinking throughout the dental curriculum
- \* Facilitation of winter term faculty retreat and presentation to faculty committees on focus group findings about student Pathways experiences
- \* Grants for teaching innovation received by Al-Rawi, Benavides, Gwozdek, Kerschbaum, and Kinney

- \* Interactive theatre vignette creation and presentation on student/faculty relations
- \* Presentation of a workshop on actively engaging students in large lectures
- \* Teaching academy for newly hired faculty in health science disciplines

#### **Education**

- \* Consultation for workshop on GSI development
- \* Consultation on Rackham diversity initiatives
- \* Consultation with Ritsumeikan University Institute for Teaching and Learning
- \* Grant for teaching innovation received by Dershimer
- \* Hiring and mentoring of graduate student interns from the Center for the Study of Higher and Postsecondary Education (CSHPE)
- \* Meetings with prospective and current graduate students
- \* Participation in CSHPE faculty meetings
- \* Participation in CSHPE orientation for new students

#### **Engineering**

- \* Assistance with survey design and IRB approval process for evaluation of EECS 314
- \* Collaboration on workshop design for teaching multinational students
- \* Collaboration on research project analyzing the impact of screencasts and related innovations on student learning, with attention to the impact of students from diverse demographic and academic subgroups
- \* Consultation on initial design of an ePortfolio project for graduate students, including recruitment of graduate students and presentations at two meetings
- \* Consultations on NSF proposal preparation, including the NSF CAREER award
- \* Consultations on student retention issues more broadly
- \* Creation and presentation of interactive theatre vignettes for CEE on staff/faculty relations
- \* Creation and presentation of interactive theatre vignettes for seminar on graduate student/research advisor interactions
- \* Development and facilitation of half-day teaching orientation program for new engineering faculty
- \* Facilitation of a workshop for ENGR 580 on teaching effectively with i>clickers
- \* Grants for teaching innovation received by Chesney, Cohn, Eniola-Adefeso, Fowler, Jeffers, Liu, Lu, Mirecki Millunchick, Sheffield, Sienko, Strassman, Stegemann, Tilbury, and Yalisove
- \* Hiring, training, and supervision of engineering teaching consultants (ETCs)
- \* Interactive theatre performance for fall and winter GSI orientations on how gender influences teaching and learning in an introductory science course
- \* Interactive theatre performance on evaluation bias in hiring for the Recruit and Hire Workshop

"Once again, I am impressed with and appreciative of the awesome CRLT staff! They facilitated an outstanding departmental retreat for us today on the topic of engaging millennial learners. They were very responsive to our request regarding the subject manner of the retreat, meeting with me, listening and responding to my suggestions, and tailoring the event accordingly. They presented materials and ideas that were backed by research, and they were wonderful role models of how to convey information in a manner that meets the needs of their audience. I feel very fortunate to have such an outstanding resource on our

-U-M Associate Dean

campus."

- \* Midterm student feedback and individual consultations for faculty
- \* Networking sessions for faculty engaged in engineering education research to discuss and refine their
- \* Ongoing consultation with the associate deans about CRLT in Engineering initiatives for faculty and
- \* Organization and facilitation of a customized GSI training program prior to the start of classes for the Fall 2011 and Winter 2012 terms, including theatre performance, and advanced practice teaching sessions
- \* Organization and facilitation of a customized training program for instructional aids (IAs) in the Fall 2011 and Winter 2012 terms
- \* Organization of an annual poster fair for faculty and GSIs showcasing scholarship and research in engineering education
- \* Organization of the college's Richard and Eleanor Towner Prize for Outstanding Graduate Student Instructors, including the nomination, selection, and publicity processes
- \* Oversight of the Rackham Certificate Program in Engineering Education Research
- \* Participation in Center for Engineering Diversity and Outreach Thought Leaders meeting
- \* Presentation on student teams to ENGR 590: Engineering in the K-12 Classroom
- \* Presentation on the ETC Program to GSIs in chemical engineering, EECS, IOE, and mechanical engineering at departmental orientations
- \* Presentations on CRLT in Engineering and its impact at separate meetings of department chairs and program directors
- \* Presentations on ethics and evaluation of teaching for ENG 580: Teaching Engineering
- \* Programs for new faculty on strategies for new faculty success, preparing a CAREER proposal, and networking with senior colleagues
- \* Review of survey for EECS 314
- \* Workshops for ETCs on observing classes, midterm student feedback, practice teaching, strategies for working with GSIs, consulting with GSIs, and research in engineering education
- \* Workshops for faculty on education research, ethical development in undergraduates, inspiring the entrepreneurial mindset, instructional technology, research-based principles for making learning work, and using concept questions to engage students
- \* Workshops for graduate students and postdoctoral scholars on low-stakes ways to assess student learning, best teaching practices, education research, the teaching philosophy statement, seven simple strategies to improve your teaching, working with your advisor

#### Kinesiology

- \* Consultation on distance learning
- \* Design and analysis of surveys and focus groups of alumni and current students in sport management and movement science programs and consultations on implications of findings
- \* Teaching academy for newly hired faculty in health science disciplines

#### Law

- \* Consultation about IRB approaches for SoTL project (and TTI grant)
- \* Consultation with faculty diversity committee on options for responding to classroom climate issues
- \* Design and analysis of surveys and focus groups to evaluate the impact of the Michigan Access Program and consultations on redesigning the program

#### Literature, Science, and the Arts

#### • Afroamerican and African Studies

- \* Faculty Institute on building dialogue and dialogue skills
- \* Grants for teaching innovation received by Sweeney and Ward
- \* Participation in engaged pedagogy forum
- \* Planning and facilitation of year-end faculty retreat

#### • American Culture

- \* Consultation on planning year-end faculty retreat; facilitation of the retreat; compilation of notes
- \* Faculty Institute on building dialogue and dialogue skills
- \* Grants for teaching innovation received by Kimewon and Noori
- \* Planning and facilitation of year-end faculty retreat

#### • Asian Languages and Cultures

\* Grant for teaching innovation received by Grande, Sakakibara, and Zhao

#### Astronomy

\* Grant for teaching innovation received by Bell, Evrard, and McKay

#### Chemistry

- \* Consultation on the evaluation of the use and usefulness of online teaching materials in Chemistry 125
- \* Workshop on evaluation techniques for instructional interventions for Michigan Evaluation of Learning Objects-3D grant

#### Classical Studies

\* Grants for teaching innovation received by Markus and Seo

#### Communication

\* Coordination of early feedback for all new GSIs

#### • Comparative Literature

- \* Collaboration on planning and implementing a faculty institute, "Pedagogies of Translation"
- \* Consultation on planning for Translation Theme Semester
- \* Grants for teaching innovation received by Merrill and Seo

#### • Dean's Office

- \* Assistance with research design for assessment of Michigan Learning Communities
- \* Collaboration with English Language Institute to develop and facilitate a three-week intensive course in August 2011 and a Winter Term 2012 course for graduate students educated abroad in languages other than English who plan to have GSI appointments in LSA, including interactive theatre performances for GSIs about gender issues in the classroom
- \* Consultation and design of feedback form for evaluation of the Understanding Race Project, in support of the Winter 2013 LSA theme semester
- \* Planning and implementation of pilot large course initiative for engaging students in large courses and consultation on design of next stage of the initiative
- \* Consultations and collaborations on curriculum reform
- \* Coordination of early feedback for GSIs who are instructors of record for upper-level courses
- \* Development and facilitation of a teaching academy for all new assistant professors in the college, including a two-day orientation, facilitation of midterm student feedback sessions, facilitation of workshops and disciplinary meetings during the academic year, and a final program on the place of

teaching in promotion and tenure

- \* Interactive theatre performance for new assistant professors on mentoring graduate students
- \* Interactive theatre performance on a day in the life of a university department for key administrators
- \* Multiple interactive theatre presentations on how gender and faculty rank influence dynamics and the decision-making process of tenure committees
- \* Organization and facilitation of GSI orientation training programs prior to Fall 2011 and Winter 2012 terms
- \* Session for faculty GSI coordinators to share strategies on GSI training
- \* Training for all incoming GSIs about sexual harassment, using interactive theatre performances
- \* Workshops for GSMs and GSI coordinators about observing classes, midterm student feedback, practice teaching, strategies for working with GSIs, and consulting with GSIs.

#### • Earth and Environmental Sciences

\* Grants for teaching innovation received by Dick and Poulsen

#### Ecology and Evolutionary Biology

- \* Consultation on ISL project and poster preparation for Enriching Scholarship
- \* Implementation of LSA large course initiative (pilot)

#### • English Language and Literature

- \* Consultation on ISL project and poster preparation for Enriching Scholarship
- \* Grants for teaching innovation received by Chamberlin, Lupton, Marshall, Porter, Silver, Sweeney, Tinkle, and Yergeau
- \* Workshop on evaluation techniques for instructional interventions for Michigan Evaluation of Learning Objects-3D grant

#### • English Language Institute

- \* Collaboration on two intensive courses for graduate students whose undergraduate education was in a language other than English and who plan to have GSI appointments in LSA
- \* Interactive theatre performance on climate in the classroom

#### • Germanic Languages and Literatures

\* Grant for teaching innovation received by Dabak

#### History

- \* Consultation on pedagogical training and support for instructors of History 195
- \* Grant for teaching innovation received by Alberto
- \* Participation in group consultation session for instructors of History 195
- \* Participation in History 195 Informational Meeting for Potential Instructors
- \* Workshop on evaluation techniques for instructional interventions for Michigan Evaluation of Learning Objects-3D grant

#### Mathematics

- \* Grants for teaching innovation received by Kubena and LaRose
- \* Interactive theatre performance about gender in the classroom as part of the orientation program for instructors teaching introductory calculus
- \* Preparing future faculty workshop for graduate students on developing a teaching philosophy statement and the role of the teaching statement in the academic job search

#### • Molecular, Cellular, and Developmental Biology

\* Implementation of LSA Large Course Initiative (pilot)

#### • Michigan Community Scholars Program

\* Participation in meetings with visiting expert on community organization and activism

#### Museum Studies

\* Grant for teaching innovation received by Taylor

#### • Near Eastern Studies

- \* Assistance with survey for evaluation of Arabic Language Flagship program
- \* Design, distribution, and analysis of student surveys about course selection criteria in 4 large courses
- \* Design, distribution, and analysis of survey about website and slide database tool for ACABS 277

#### Philosophy

\* Panel discussion on teaching controversial topics

#### Physics

- \* Facilitation of multiple interviews and student surveys to support Next Generation Learning Challenge Grant
- \* Grants for teaching innovation received by Evrard, Gerdes, and McKay

#### • Political Science

- \* Implementation of LSA Large Course Initiative (pilot)
- \* Presentation on teaching and academic hiring for graduate students enrolled in PS 500: Preparing for Careers in Political Science
- \* Workshop for GSIs on teaching with everyday technologies
- \* Workshop on conflict and facilitation in the classroom
- \* Workshop on the job market and writing a teaching philosophy

#### • Program in the Environment

- \* Coordination of midterm student feedback for new GSIs
- \* Grants for teaching innovation received by Bouma and Shriberg
- \* Workshop for GSIs on effective strategies for engaging students in group work

#### Psychology

- \* Grant for teaching innovation received by Weissman
- \* Participation in study of influence of theatrical gender portrayal on testosterone levels
- \* Presentation on U-M Graduate Teacher Certificate and CRLT programs for graduate students at graduate student orientation
- \* Workshop for GSIs on effective college teaching principles and practices
- \* Workshop for GSIs on teaching and academic hiring
- \* Workshop on evaluation techniques for instructional interventions for Michigan Evaluation of Learning Objects-3D grant

#### • Residential College

\* Grants for teaching innovation received by Fox and Thomas

#### • Romance Languages and Literatures

\* Grants for teaching innovation received by McMann, Meyer, Morillo, and Szpiech

#### • Screen Arts and Cultures

\* Grants for teaching innovation received by Rayher and Sarris

#### • Slavic Languages and Literatures

\* Grant for teaching innovation received by Makin

#### Sociology

- \* Grant for teaching innovation received by Sfeir-Younis
- \* Interactive workshop on conflict in the classroom for first-year graduate students

#### Statistics

\* Workshop on evaluation techniques for instructional interventions for Michigan Evaluation of Learning Objects-3D grant

#### • Sweetland Center for Writing

- \* Assistance with evaluation of the Dissertation Writing Institute
- \* Collaboration on a grant from the Teagle and Spencer Foundations on using metacognitive strategies to promote discipilnary writing and critical thinking skills
- \* Consultation on ISL project and poster design
- \* Focus groups with faculty, staff, and students in support of the assessment of the LSA upper-level writing requirement (ULWR)

#### • Women's Studies

- \* Faculty Institute on building dialogue and dialogue skills
- \* Grant for teaching innovation received by Welch

#### Medicine

- \* Consultation on assessment tools for NSF Grant
- \* Consultation on developing a faculty retreat on teaching for M1 & M2 faculty
- \* Consultation on strategies for engaging diverse views on ethical practice during lab trainings
- \* Creation and presentation of interactive theatre vignettes addressing mistreatment in medical school
- \* Grants for teaching innovation received by DiPonio, Du, Hammoud, Hildebrandt, Macy, Monrad, Morgan, McLean, Rizk, and Woodward
- \* Interactive theatre performance on breaking bad news
- \* Interactive theatre performances about faculty advising faculty
- \* Interactive theatre performances on how gender and faculty rank influence dynamics in a search committee meeting, faculty mentoring, and the decision-making process of tenure committees
- \* Provision of resources on CRLT programs and services at faculty orientation
- \* Teaching academy for newly hired faculty in health science disciplines

#### Music, Theatre and Dance

- \* Grants for teaching innovation received by Ampene, Grant, Gurevich, Hopkins, Mengozzi, and Yip
- \* Planning and facilitation of year-end retreat for theatre department
- \* Presentation for DMA students on developing their teaching philosophies

#### **Natural Resources and Environment**

- \* Consultation about curricular reform
- \* Coordination of feedback for all new GSIs
- \* Follow-up provision of resources to dean regarding assessment of required core master's curriculum

#### Nursing

- \* Consultation on faculty development programs regarding mentoring undergraduate and graduate students in research and teaching contexts
- \* Consultations on distance learning teaching strategies and technologies
- \* Facilitation of faculty retreat on active learning
- \* Grants for teaching innovation received by Aebersold, Dallwig, Fenske, and Hartman
- \* Meetings with faculty and architects about classroom design and active learning in new building.
- \* Teaching academy for newly hired faculty in health science disciplines

#### **Pharmacy**

- \* Consultation on the design of an exit survey for graduating PharmD students
- \* Consultations and literature review to inform assessment of new team-based learning approaches
- \* Consultations on faculty development and formative and summative evaluations of teaching for the faculty development advisory committee
- \* Teaching academy for newly hired faculty in health science disciplines

#### **Public Health**

- \* Consultations for health management and assessment plan including curriculum map, and exit survey design
- \* Collection and analysis of student feedback for health behavior and health education capstone course
- \* Consultation on evaluation strategies and collection and analysis of student feedback for new interdisciplinary course PH 600
- \* Professional development workshop for first-year HBHE students
- \* Teaching academy for newly hired faculty in health science disciplines
- \* Workshop on engaging students in discussion for GSIs

#### **Public Policy**

- \* Consultations with dean's office on strategic and curricular issues
- \* Consultations with undergraduate program director
- \* Consultations on MPP exit survey
- \* Coordination of midterm student feedback program for new faculty and faculty teaching in the core curriculum

#### Rackham Graduate School

- \* Consultation with Kalamazoo and Oberlin Colleges on postdoctoral fellowship and mentorship programs
- \* Consultations on support for GSIs
- \* Coordination and evaluation of the U-M Graduate Teacher Certificate Program, including reviewing portfolios and awarding certificates; leadership of Advisory Committee
- \* Development of an NSF subcontract proposal for CIRTL
- \* Facilitation of "What's It Like?" a three-session series and website highlighting faculty worklife in different institutional contexts
- \* Focus group and interviews for graduate student professional development needs assessment research
- \* Implementation and evaluation of Rackham-CRLT Preparing Future Faculty Mentorship Program with faculty at other institutions
- \* Organization, implementation, and evaluation of the month-long, Rackham-CRLT Seminar on College Teaching: Preparing Future Faculty for advanced doctoral students

- \* Organization, implementation, and evaluation of one-day Preparing Future Faculty conference
- \* Organization, implementation, and evaluation of the Postdoctoral Short-Course on College Teaching in Science and Engineering
- \* Organization, implementation, and evaluation of the 6-session program on Multicultural Facilitation for the Classroom for GSIs, with IGR.
- \* Participation in Outstanding GSI Awards selection process and presentation of winners at awards ceremony
- \* Participation in Rackham New Graduate Student Orientation Resource Fair, fall and winter
- \* Participation in selection of U-M postdoctoral fellows at Oberlin and Kalamazoo Colleges, and evaluation of the program

#### **Social Work**

- \* Interactive presentation for SW708 class
- \* Teaching academy for newly hired faculty in health science disciplines

#### Customized Services for Other Units at U-M

#### Arts at Michigan

\* Consultation and review of faculty grant program applications

#### Arts of Citizenship

\* Participation on executive committee and search committee

#### **ArtsEngine**

- \* Member of administrative core group
- \* Participation in national task forces on research and planning to promote the value of arts at research universities

#### **Career Center**

- \* Collaboration to plan, implement, and evaluate a one-day conference on Preparing Future Faculty
- \* Consultation on design and implementation of grants programs

#### **Center for Entrepreneurship**

\* Consultation on design and implementation of grants programs

#### Ginsberg Center for Community Service and Learning

\* Consultation on training for graduate students and peer instructors

#### Information Technology Services

\* Organization of a faculty learning community on using Google Apps in teaching

#### Institute for Research on Women and Gender

- \* Collaboration on planning for the Strategies Toward Excellent Practices in Departments program (STEP)
- \* Multiple interactive theatre performances and presentations on departmental change (as part of STEP workshop)
- \* Multiple interactive theatre presentations on how gender and faculty rank influence dynamics, and the decision-making process of tenure committees

#### Institute for Social Research

- \* Theatre performance of trigger vignettes on faculty-staff relations
- \* Workshop on multicultural pedagogy for postdoctoral students in the Emerging Scholars Interdisciplinary Network and the Program for Research on Black Americans

#### Libraries

- \* Collaboration on Provost's Teaching Innovation Prize (TIP) competition
- \* Consultation on assessment for Eng 125 and UC 174
- \* Consultation with library team on research and library resource seminar for GSIs
- \* Grant for teaching innovation received by McCollough

#### Office of the President

- \* Hosting of a visiting scholar from Shanghai Jiao Tong University (SJTU), China, for a six-week fellowship in faculty development as part of the China Initiative
- \* Mentorship of visiting scholar from Makerere University, Uganda, as part of the U-M African Presidential Scholars Program (UMAPS)
- \* Organization of the two-week Michigan-China University Leadership Forum for a delegation of 24 Chinese higher education leaders chosen and funded by the Chinese Ministry of Education
- \* Preparation of White Paper on Multidisciplinary Learning and Team Teaching
- \* Reports to the President's Task Force on Multidisciplinary Learning and Team Teaching (MLTT)

#### Office of the Provost and Executive Vice President for Academic Affairs

- \* Chair of Diversity Council
- \* Chair of Diversity Council executive committee
- \* Collection of student feedback across six Michigan International Seminars for Undergraduates (MISU), reporting results to faculty and MISU coordinators for future initiative planning
- \* Consultation with Center for Educational Outreach (CEO) to support Wolverine Express
- \* Coordination of fourth campus-wide Provost's Teaching Innovation Prize in collaboration with the senior vice provost and the dean of libraries
- \* Coordination on grants programs for LEO lecturers
- \* Hosting of diversity networking event
- \* Interactive theatre performance for the U-M community and the public about students with disabilities
- \* Leadership of and participation in Vice Provost and Associate Dean Group
- \* Organization and facilitation of New Faculty Orientation, including interactive theatre performance
- \* Organization, facilitation, and evaluation of Provost's Campus Leadership Program for chairs and associate deans, including theatre performances on working successfully with staff and on evaluation bias in hiring
- \* Organization of competition to select U-M faculty for Michigan Distinguished Professor of the Year Award
- \* Organization of competition to select U-M faculty for U.S. Professors of the Year Award
- \* Organization of competition to select Thurnau Professorships
- \* Organization of dinner honoring new Thurnau Professors at the 25th anniversary
- \* Participation in debrief of CEO Wolverine Express for 2011-2012
- \* Participation in outreach of the CEO Wolverine Express

- \* Participation on Diversity Coordinating Committee to support staff diversity committees across campus, including assistance with planning annual conference
- \* Planning and implementation of the Provost's Seminar, Teaching with Collections: Engaging Students in the Archives, Museums and Gardens of the University of Michigan
- \* Planning of meetings between student leaders and members of Diversity Council
- \* Review of study about inquiry-based learning in mathematics

#### **Palmer Commons**

\* Creation and presentation of interactive theatre vignettes for student staff training

#### **Postdoctoral Association**

\* Workshop on writing a statement of teaching philosophy

#### **Program on Intergroup Relations**

\* Collaboration on implementation of a faculty institute on dialogue and dialogue skills for faculty in American culture, Afroamerican and African studies, and women's studies

#### Services for Students with Disabilities

\* Development of website resource for instructors on teaching students with disabilities

#### **Teaching and Technology Collaborative**

- \* Collaboration with other instructional technology units to organize and facilitate the Enriching Scholarship program, a university-wide, one-week program of workshops, demonstrations, and presentations
- Organization of Provost's Teaching Innovation Prize and Investigating Student Learning poster session (for Enriching Scholarship)
- \* Seminars and workshops on technology and teaching

#### Undergraduate Research Opportunity Program (UROP)

- \* Consultations on training program for inquiry based learning
- \* Facilitation of journal clubs by science and engineering postdocs

#### **U-M Bookstore**

\* Consultation on strategic planning

# Collaborations and Committee Work

#### Collaboration with Other Units

Collaboration with other U-M offices is a key component of CRLT services. During 2011-2012, CRLT worked with all schools and colleges on teaching improvement projects. Additionally, CRLT collaborated with:

- \* Arts at Michigan
- \* ArtsEngine
- \* The Career Center
- \* Center for the Education of Women
- \* Digital Media Commons
- \* Division of Student Affairs
- \* Dual Career Services (Provost's Office)
- \* English Language Institute
- \* General Counsel
- \* Ginsberg Center for Community Service and Learning
- \* Information Technology Services
- \* Institutional Equity
- \* Instructional Design Group
- \* Language Resource Center

- \* LSA Student Academic Affairs
- \* LSA Instructional Support Services (ISS)
- \* MERLOT Community
- \* Native Scholars Interdisciplinary Group
- \* News Service
- \* Office of Academic Multicultural Initiatives (OAMI)
- \* Office of New Student Programs
- \* Science Learning Center
- \* Services for Students with Disabilities
- \* Sweetland Center for Writing
- \* Teaching and Technology Collaborative
- \* University Library
- \* Wolverine Express (Office of Academic Outreach)

#### Committee Work

As part of their collaborative efforts, CRLT staff served on a large number of committees within U-M and nationally:

- \* Academic Services Board (ASB)
- \* Arts at Michigan Course Connection Grant Review Committee
- \* ArtsEngine National Task Forces
- \* Arts of Citizenship Executive Committee
- \* Center for Engineering Diversity and Outreach–Faculty Advisory Council
- \* China Strategy Group
- \* CIRTL Network: Proposal Development Team
- \* COE Towner Prize for Outstanding GSIs
- \* COE NextProf: Diversifying Academia Working Group
- \* Diversity Conference Planning Committee

- \* Diversity Council
- \* Diversity Council Executive Committee
- \* E-Textbook Planning Committee
- \* E-Portfolio Special Interest Group
- \* College of Engineering Undergraduate Education Team
- \* Enriching Scholarship Planning Committee
- \* Enriching Scholarship Keynote Planning Committee
- \* Faculty Advisory Council for the Center for Engineering Outreach and Diversity
- \* IT Governance Teaching and Learning Advisory Group
- \* LSA Theme Semester on Language

#### Committee Work (cont.)

- \* MERLOT
- \* Provost's Performance and Evaluation Committee (for lecturers)
- \* Provost's Teaching Innovation Prize Selection Advisory Committee
- \* Rackham Outstanding Graduate Student Instructor Awards Committee
- \* Rackham's Postdoctoral Advisory Group
- \* School of Education Clinical Faculty Task Force
- \* STEP Planning Committee

- \* Teaching and Learning Advisory Group
- \* Teaching and Technology Collaborative
- \* Teaching and Technology Collaborative, Social Media Committee
- \* Thurnau Selection Advisory Committee
- \* U-M Graduate Teacher Certificate Advisory Committee
- \* U.S. Professor of the Year Selection Committee
- \* Vice Provost and Associate Dean Group (VPADG)

#### **External Committee Participation**

- \* Association for Theatre in Higher Education (ATHE) Interactive Theatre Task Force (J. Steiger)
- \* Board of Trustees for the Alvin M. Bentley Foundation (C. Cook)
- \* CIRTL Network: Network Faculty Teaching Institute Working Group (R. Niemer)
- \* Committee on Institutional Cooperation (CIC) Teaching Center Directors Group (C. Cook, M. Kaplan)
- \* External evaluation visits for NSF PAID grant to the University of Akron, Bowling Green State University, Case Western Reserve University, Cleveland State University, University of Toledo, and Kent State University (M. Wright)
- \* Frontiers in Education Conference Steering Committee (C. Finelli)
- \* Ivy Plus Consortium on Teaching (C. Cook)
- \* POD Graduate and Professional Student Development (GPSD) Committee Chair (M. Wright)
- \* Site Visit Team to University of Illinois, Chicago for NSF ADVANCE Grant (M. Wright)

## New Initiatives in 2011-2012



#### **CRLT's 50th Anniversary**

Established in 1962 by the U-M Regents following the recommendation of a U-M Faculty Senate committee, CRLT was the first teaching center in the world. Since then over 1,000 colleges and universities across the U.S. and around the world have developed teaching centers. To mark this milestone, CRLT organized a series of events over two days in May 2012. The celebration began with a gathering of over 50 teaching center representatives from 27 campuses across the country. Guests included teaching center directors from the Ivy + (Ivy League universities plus MIT, Stanford, and the University of Chicago), the CIC (Big Ten campuses plus the University of Chicago), and the current and former presidents of the Professional and Organizational Development Network (POD), the professional association for teaching centers. The next day, the visitors from other universities joined over 350 U-M faculty, graduate students, and staff for a half-day campus-wide celebration. After opening remarks by Provost Phil Hanlon and Senior Vice Provost Lester Monts, President Mary Sue Coleman spoke about Enriching Undergraduate Learning at Research Universities, and then hosted a President's Panel on this topic. The panelists were Stanley Ikenberry, President Emeritus of the University of Illinois and the American Council on Education (ACE), Shirley Malcom, head of the Directorate

for Education and Human Resources at the American Association for the Advancement of Science (AAAS), Carol Geary Schneider, President of the Association of American Colleges and Universities (AAC&U), and Mika LaVaque-Manty, Arthur F. Thurnau Professor of Philosophy and Political Science at U-M. The panel was moderated by Scott Jaschik, founder of Inside Higher Ed. After the panel, the CRLT Players performed "First Class," a production that uses music, dance, and visuals to explore student diversity and the different perspectives instructors and millennial students bring to the classroom. The program ended with a Gallery of Teaching Innovations, with over 30 posters highlighting a diverse array of faculty and CRLT projects in wide and social justice, instructional technology, curriculum development, and the scholarship of teaching and learning (visit http://www.crlt. umich.edu/50th/posterfair.php to view PDFs of all the posters).

## Michigan-China University Leadership Forum

On behalf of President Coleman, CRLT developed, organized, and ran the fourth Michigan-China University Leadership Forum, a two-week program in May for the presidents of top-ranked research universities and members of the Ministry of Education from the People's Republic of China. Based on similar, highly successful programs organized by CRLT in 2006, 2008, and 2010, this intensive Forum was designed to



help the Chinese develop a deeper understanding of the characteristics of a world-class research university, using U-M as an example. The Forum set the stage for further collaborations that could benefit the University and the State of Michigan more broadly. The program featured daily seminars and discussion sessions presented by top U-M administrators (e.g., the president, provost, deans, chairs) on topics such as budget and strategic planning, research administration, and building world-class faculties; as well as sessions related to the development of teaching centers, a key strategic goal of the Chinese Ministry of Education to improve student learning. In addition to the seminars, the presidents toured the campus (e.g., the Medical School and College of Engineering), had opportunities to meet and socialize with U-M faculty from many disciplines, and traveled to Lansing to meet with Governor Snyder. The program was co-sponsored by grants from the John D. Evans Foundation, The Dow Chemical Company, Delta Dental, and AVL, but was financed primarily by the Chinese Ministry of Education. CRLT conducted extensive evaluation during and after the program, and there will be additional long-term evaluation to determine what the Chinese presidents learned from the Forum and what changes they implement on their own campuses as a result of participating.

> "The contents of the program were very intensive and extensive but with a clear focus. The whole Forum was well organized and scientifically designed."

-Participant in Michigan-China University Leadership Forum

#### **CRLT Faculty Associates**

CRLT named Mika LaVaque-Manty and Joanna Mirecki Millunchick Faculty Associates for the 2011-2012 academic year. The title recognized their longstanding contributions to CRLT's work and their intensive participation in special projects last year. Dr. LaVaque-Manty, Arthur F. Thurnau Professor of Political Science and Philosophy, helped plan and facilitate the Google Faculty Learning Community described below. He will continue as a Faculty Associate next year, helping to plan a Provost's Seminar on Teaching on online collaboration tools and co-authoring an Occasional Paper on the same topic. Dr. Mirecki Millunchick, professor of materials science and engineering, collaborated with CRLT in Engineering to plan and present the large course initiatives on North Campus that are also described below.

#### Google Faculty Learning Community

CRLT and the office of Information and Technology Services (ITS) co-sponsored a faculty learning community to explore the potential of the Google online collaboration tools to enhance teaching and student learning at U-M. CRLT recruited 23 faculty from 15 schools and colleges with varying levels of experience incorporating technology into their teaching. In collaboration with CRLT faculty associate Mika LaVaque-Manty, CRLT organized monthly meetings for participants. In the fall term, faculty gained handson experience with the various collaboration tools and shared ideas about how to use the applications in their teaching. In the winter term, they experimented with online collaboration tools in their classrooms and shared preliminary results with one another. Pilot projects included a wide range of Apps, such as Docs, Blogger, Sites, and Google +, and a variety of teaching contexts, from large lectures to graduate seminars and clinical experiences. Faculty also provided important feedback to ITS about the implementation of the Google suite. As a result of faculty requests, Google has agreed to make more of the applications available for instruction, and faculty also provided input on how best to embed Google Apps into CTools. CRLT will disseminate results of the faculty learning community, along with guidelines for best practices using online collaboration tools for teaching, in an upcoming Occasional Paper and in campus-wide seminars and workshops.

"The large course initiative was a fantastic program that far exceeded my expectations! Not only did it provide me with great ideas and an opportunity to freely ask questions about how to improve my teaching, but I greatly valued the networking opportunities with other faculty of various levels of expertise facing similar challenges in Engineering."

-Faculty Participant in COE Large Course Initiative

#### **Large Course Initiatives**

In collaboration with the associate deans for undergraduate education in LSA and engineering, CRLT organized two separate large course initiatives. The goals of the program were to understand, systematize, and disseminate strategies and practices for increasing student engagement and learning in large courses. The LSA cohort included three faculty who teach introductory genetics, as well as three faculty who teach introductory courses in the various subfields of political science (world politics, political theory, American politics). Each group met over the course of the year to discuss the implications of research on student learning for their teaching, with a particular emphasis on incorporating active learning. As a result of participating, faculty experimented with a range of pedagogical approaches, including clickers, online quizzes, and interactive, small-group activities. CRLT also conducted midterm student feedback sessions for each faculty member.

On North Campus, the initiative focused on chemical engineering in the fall, and it included a series of six meetings that featured research-based best practices and demonstrations of technology. The three faculty participants learned from each other and from their successful peers and were able to adopt effective teaching practices and instructional technology for their large-course teaching. In the winter term, CRLT in Engineering's director, together with Faculty Associate

Joanna Mirecki Millunchick, co-facilitated a Teaching Circle for Large Engineering Courses. Twenty-five faculty applied, and seven were invited to participate. The program consisted of four monthly sessions on relevant research and its implications, midterm student feedback, pre- and post-term attitudinal surveys, and classroom observations at the beginning and end of the term. Participants were eligible for a \$1,000 grant to support their teaching in large courses.

## Health Sciences Teaching Academy

In collaboration with the deans of dentistry, kinesiology, medicine, nursing, pharmacy, public health, and social work, CRLT offered a Health Sciences Teaching Academy (HSTA) for new assistant and clinical assistant professors in these units. The goals of the HSTA are to help new faculty maximize student learning in courses and clinical settings and to foster interdisciplinary collaboration among faculty in these schools and colleges. The program included a two-day orientation in August, which introduced faculty to senior colleagues in their disciplines and engaged them in sessions such as Teaching in Lectures, Teaching and Evaluating Critical Thinking in the Clinic, and Enhancing Teaching and Learning Through Instructional Technology. In addition, participants had the opportunity to deliver a practice lesson and receive feedback on their teaching. During their first term of teaching, the new faculty members also participated in CRLT's midterm student feedback program. In addition, participants gathered in early fall in small groups to discuss their current teaching and plans for the winter, and again as a full group in January for a set of roundtable discussions on pedagogical topics, such as using groups, making student presentations effective, and testing and grading.

#### **CRLT Book**

As the first teaching center in the world and a recognized leader in the field, CRLT has written a book that documents its approach to faculty development, *Advancing the Culture of Teaching on Campus: How a Teaching Center Can Make a Difference* (Stylus Publishing). The volume contains chapters authored by CRLT's

"I read Advancing the Culture of Teaching on Campus over break. It was awesome. I'm just the person it is written for."

-California University Teaching Center Director

professional staff that describe CRLT's programs and strategies, such as leading a teaching center, measuring a center's effectiveness, and strengthening diversity through faculty development (see pp. 57-58 for a full list of chapters). Timed to coincide with CRLT's 50th anniversary in 2012, the book is a resource for the successful operation of a teaching center on a research university campus. The book was translated into Chinese by Zhejiang University Press and given to participants in the 2012 Michigan-China University Leadership Forum.

#### **Visiting Scholars**

CRLT regularly receives visitors from teaching center staff and academic administrators interested in specific programs or in developing teaching centers on their campuses (see p. 7). For the first time in 2011-2012, CRLT was able to offer an extended internship to two visiting scholars. In response to a call for CRLT Fellows presented at the 2011 Michigan Faculty Development Seminar for Chinese university teaching center directors and senior administrators, CRLT invited Dr. Jin Xiong to spend six weeks of the fall term in Ann Arbor. Dr. Xiong is an associate professor of electronic engineering at Shanghai Jiao Tong University (SJTU), where she works with the newly created teaching center. She began her visit by meeting CRLT staff in Atlanta for the annual conference of the Professional and Organizational Development Network (POD, the professional organization for teaching center staff). She then spent six weeks at CRLT learning about consultations and midterm student feedback, evaluation of

teaching, and assessment of student learning. She also had the opportunity to shadow CRLT consultants and to visit classrooms of outstanding U-M faculty.

Dr. Andrew State is a senior lecturer in sociology at Makerere University in Uganda who came to Ann Arbor under the auspices of the University of Michigan African Presidential Scholars Program (UMAPS). Designed to build and strengthen lasting relationships with African scholars and their institutions, the program supports faculty development in Africa. Individuals are paired with a U-M faculty mentor during their stay and work collaboratively on projects that help advance their careers. Dr. State spent six months at U-M focusing on teaching, learning, and curriculum development in higher education to inform his efforts to develop a teaching center and improve the culture of teaching at Makerere University. During his stay, CRLT's Director of Assessment was his campus mentor, and they met regularly to discuss his plans for developing a center. In addition, Dr. State participated in numerous CRLT seminars, consulted individually with other CRLT staff members, and presented the results of his work at a CRLT staff retreat.

#### **Blended-Teaching Seminar** (Flipped Classes)

In response to the growing interest on campus in online learning tools and flipped classrooms, CRLT offered the faculty seminar Blended Teaching: Combining Face-to-Face and Online Learning as part of CRLT's winter Seminar Series. Twenty-eight faculty enrolled in the seminar, and the four sessions were delivered in a variety of modalities: two involved faceto-face meetings, one took place online and synchronously in Google+, and one used blogs and wikis for an asynchronous exchange. This format allowed participants to gain hands-on experience with a variety of teaching methods and technologies from the perspective of their future students. The seminar was organized around the course planning process, using backward design to help participants reflect on the most effective ways to integrate technologies into their courses.

## Program Areas



#### **CRLT Website**

Faculty, instructional consultants, and administrators at U-M and in higher education institutions throughout the

U.S. and around the world visit the CRLT website to obtain resources on teaching and learning. Between June 1, 2011, and May 31, 2012, CRLT's website received over 480,400 visits, representing close to 389,000 unique visitors from 214 countries. Approximately 5.4% of visitors were from U-M, and 65% of visitors were from the United States.

Many of CRLT's pages are highly ranked by search engines such as Google, and about 76% of all visits to CRLT's website come from search engines. Top search terms include teaching styles, teaching philosophy examples, active learning, teaching strategies, and technology in the classroom. Overall, the "Teaching Philosophy/Teaching Statement" page received the highest number of visits, about 10% of the total. Other popular pages include the Teaching Strategies page (9%), and the Lesson Planning page (5%).

The web page for CRLT's 50th anniversary celebration received over 2,900 visits in the spring of 2012.



#### Instructional Technology

Through consultation services, faculty development programs, and service on

university- and unit-level committees (see Committee Service, p. 22), CRLT staff members help individuals and academic units explore, integrate, and evaluate the use of instructional technology. Several programs from the 2012 academic year are highlighted below.

#### **Enriching Scholarship Conference:**

As a charter member of the Teaching and Technology Collaborative (TTC), CRLT co-sponsored the 15th annual Enriching Scholarship Conference along with the University Library, Information and Technology Services (ITS), the LSA Language Resource Center (LRC) and Instructional Support Services (ISS), and the Medical School Instructional Services - Instructional and Multimedia Development (MSIS-IMD). This weeklong event features seminars, open houses, and demonstrations on the use of technology in teaching and learning. CRLT staff co-organized the opening event, which included a poster fair that highlighted the work of the recipients of both the annual U-M Provost's Teaching Innovation Prize and CRLT's Investigating Student Learning Grant. Elliot Soloway, Arthur F. Thurnau Professor in the College of Engineering at the University of Michigan, delivered the keynote address Education in the Age of Mobilism: The Inevitable Transformation of the K-12 Classroom. CRLT also sponsored six seminars on teaching with technology as part of the conference.

#### Teaching with Technology Institute:

CRLT coordinated the Teaching with Technology Institute, co-sponsored by CRLT, LSA ISS and LRC, ITS, and MSIS-IMD. The institute was designed to help faculty explore the effective use of technology in

"TTI gave me extremely valuable information about the technology. Moreover, the staff tried to help me prepare for integrating the technology to make it most effective and least disruptive. I learned about different aspects of technology including accessibility and copyright."

-Teaching with Technology Institute Participant teaching, to further develop their technology skills, and to integrate instructional technology into their teaching (see Grants Competitions and Awards, p. 49, for a list of recipients).

#### **Large Course Initiative:**

CRLT developed a large course initiative in collaboration with LSA and the College of Engineering. CRLT consultants are assisting faculty from these units as they redesign their large courses to increase student engagement, with special emphasis on the use of IT. (For more information, see New Initiatives in 2011-2012, p. 26.)

#### **Google Faculty Learning Community:**

CRLT and the Information and Technology Services (ITS) office co-sponsored a Faculty Learning Community to explore the potential of the Google online collaboration tools to enhance teaching and student learning at U-M. CRLT facilitated monthly meetings of 23 faculty members from 15 schools and colleges to explore the applications of various online collaboration tools to teaching, share preliminary results from pilot projects in their courses, provide feedback to ITS regarding the campus-wide implementation of these tools, and identify and disseminate best practices for instructors wishing to adopt these technologies (see also New Initiatives, p. 25).

#### **Blended Teaching Seminar Series:**

As part of its seminar series for faculty, CRLT offered a four-part program on teaching using online and/ or blended course delivery (see Seminar Series, p. 27). This program included two face-to-face sessions, a synchronous online session, and an asynchronous online session, providing participants with the opportunity to experience both the pedagogies and technologies from the perspectives of students.

#### School of Nursing, 21st Century Initiative:

CRLT consulted with school of nursing faculty committees to help generate recommendations and professional development plans regarding the future uses of active learning, instructional technology, and online/blended course delivery, as well as the design of new classrooms to support these teaching methods. This initiative included a faculty retreat on active learning, as well as a 3-day Nursing Digital Teaching Institute for 11 faculty who will use an online/blended delivery format to teach graduate courses during Fall Term 2012. The institute provided hands-on experience with an array of instructional technologies and consultations on course design, including the selection of appropriate instructional technologies to achieve instructors' learning goals.



#### Multicultural **Programming**

CRLT's coordinator of multicultural teaching and learning and other profes-

sional staff develop and facilitate customized programs and services to address multicultural issues in specific contexts. Planning these programs is typically done in collaboration with administrators, faculty, and/ or graduate students who are members of the college or department that has requested the service. CRLT also provides a variety of services that are available to instructors across the campus, including campus-wide workshops, seminars, and individual consultations that address such topics as creating and maintaining inclusive classrooms, leveraging student diversity to enhance student learning, developing skills to handle class dynamics that arise from controversial topics, and enhancing the impact that multicultural content has on student learning. Following are some specific ways in which CRLT staff promoted multicultural teaching and learning at U-M during the 2011-2012 academic

- Directing a learning community for faculty teaching multicultural content, in collaboration with the Program on Intergroup Relations (IGR), to develop their skills in facilitating student dialogue, and to include deeper student engagement in class discussion (sponsored in part by a grant from the Teagle Foundation)
- Sharing information and resources about multiculturalism and diversity during the New Faculty Orientation and GSI Teaching Orientations,

- meetings in specific departments, and other campus-wide events
- Leading workshops for graduate students and for postdoctoral students on strategies for teaching and assessing multicultural material, leading discussions about diversity, and handling issues of identity and authority
- Leading workshops for faculty to help students engage more deeply in issues of diversity and social justice, and to help students better navigate social differences
- Providing support for individual instructors, and for departments and units on campus, to address diversity issues arising in instructional contexts
- Developing workshops on teaching in multinational contexts
- Creating online resources for instructors to better support students with disabilities
- Offering support for departments and units on campus interested in developing outreach programs to recruit and retain underrepresented students
- Assisting with multicultural aspects of curricular reform and academic program development across the university
- Assisting faculty analysis of how teaching innovations contribute to improved student performance across differences in the academic and social backgrounds of the students
- Serving on university-wide or college committees
  that address issues of diversity, including chairing
  the President's Diversity Council, serving on the
  Diversity Conference Coordinating Committee,
  the Academic Services Board, the Race Theme
  Semester planning committees, and the Executive
  Committee for the Arts of Citizenship Program.

#### **CRLT Theatre Program**



The CRLT Theatre Program explores ways that the performance arts can offer insights into pedagogical practices, enhance teaching and learn-

ing, support diversity, and improve institutional climate at U-M. The program is funded primarily by the Office of the Provost, the College of Engineering, the College of LSA, and the U-M ADVANCE program.

Using local professionals and student actors, the CRLT Players present provocative and interactive sketches, vignettes, and traditional theatre productions that fall under two main headings: teaching and faculty worklife. The teaching sketches address issues of pedagogy, diversity, and inclusion in university settings, ranging from classrooms to labs and clinics. Sketches about faculty worklife were developed in collaboration with the U-M ADVANCE program and cover topics such as faculty hiring, career advising, and the tenure decision-making process. All CRLT Players scripts are based on a solid foundation of research on the experiences of students, faculty, and administrators at U-M and nationally. The Players perform at large, campus-wide events (such as New Faculty Orientation); at workshops and retreats for academic departments, schools, and colleges; and at special events, such as CRLT's 50th Anniversary celebration. In addition, the Players are in demand nationally, performing for campuses and conferences around the country.

This year, the CRLT Theatre Program continued its development of *A University Department: The Musical*, with performances for key LSA administrators at U-M and a cross-section of the academic community at Purdue University. Using music to reveal intergroup tensions that are typically left unspoken in academic units, this production explores the interpersonal and institutional challenges that can hinder change efforts in higher education. In 2011-2012, the Players also developed two sets of customized vignettes. *Faculty-Staff Vignettes* aid departments in opening a dialogue

#### What people are saying about the CRLT Players

"Excellent performance. It brings up many questions new faculty must think about before entering the classroom for the first class."

"SO thoughtful. SO fun. Really gave me a lot to reflect on."

"Excellent program and a model for interactive learning."

"I was initially skeptical as to how useful this performance would be. However, the actors did an excellent job, the characters and issues were relevant, and the discussion leader made the whole process engaging."

about the problems that can arise in faculty-staff work relationships and strategies for cultivating a more positive work environment. A second set of vignettes was written for the medical school to provoke discussion about the climate of learning in clinical settings. Over the past year, the Players have also strengthened their existing relationship with U-M's ADVANCE program by designing a workshop for the Committee on Strategies and Tactics for Recruiting to Improve Diversity and Excellence (STRIDE). This workshop investigated the factors that can contribute to evaluation bias by asking participants to role-play different character types in common university evaluation scenarios. In March, the Players welcomed Sara Armstrong, an accomplished arts administrator, director, and performance scholar, as the new artistic director of the CRLT Theatre Program.

In the 2011-2012 academic year, the CRLT Players performed 40 times on campus for approximately

3,080 audience members. The Players also performed at the following campuses and conferences:

- American Geophysical Union Meeting
- Florida International University
- Purdue University
- Society for Neuroscience Workshop for Department Chairs, Irvine, CA
- University of Kentucky
- University of New Hampshire

The CRLT Theatre Program's artistic director also consults with faculty and staff on other campuses who are interested in using theatre for faculty development and/or developing their own interactive theatre groups. In 2011-2012, the outgoing artistic director consulted with representatives of the following institutions:

- Denison University
- Madonna University
- McGill University
- Northeastern University
- University of Maryland-Baltimore County
- University of Wisconsin-Milwaukee

#### Services for Assessment of Student Learning

During the 2011-2012 academic year, CRLT staff worked with individual faculty and academic units to review their current courses and curricula, develop new curricular offerings, and assess the results of course and curricular innovations. Services included assistance with data collection and analysis, consultations on using data for improvement, facilitation of faculty discussions, and provision of funds through CRLT's various grants programs. All of CRLT's assessment projects have two defining characteristics: 1) they are led by faculty responsible for the curriculum or the courses being assessed, with CRLT providing support and expertise as necessary; 2) they are action oriented, generating data that can be used by faculty and faculty committees to improve their courses or curricula. CRLT's assessment work included the following projects.

Campus-Wide and Multiple-Unit Assessment Initiatives and Services

#### Multidisciplinary Learning and Team Teaching Initiative

In Fall 2005, U-M President Mary Sue Coleman dedicated \$2.5 million dollars to support team-teaching efforts and interdisciplinary degree programs at the undergraduate level, the Multidisciplinary Learning and Team Teaching (MLTT) Initiative. The MLTT Steering Committee called for proposals and allocated start-up funds for outstanding new courses and programs that would target first- and second-year students and be models for others. The MLTT Steering Committee asked CRLT to help document the program's impact, in addition to providing pedagogical consultation for the funded faculty.

In 2011-2012, CRLT staff wrote a white paper summarizing the impact of the MLTT project. Data from student surveys showed that MLTT courses were highly successful in preparing students to address issues in the changing future, developing the skills needed for complex problem solving, and increasing students' ability to transfer skills from MLTT courses to other contexts.

#### National Institute for Learning Outcomes Assessment

CRLT represented the University of Michigan in a collaboration between the National Institute for Learning Outcomes Assessment (NILOA) and the Committee on Institutional Cooperation (CIC, Big Ten Universities plus the University of Chicago). The purpose of the project is to investigate the question, "What does learning outcomes assessment look like at large, complex research universities?" CRLT participated in multiple meetings and online discussions with representatives from CIC universities and NILOA. The project enables CIC institutions to share best practices for measuring and communicating assessment data.

#### Investigating Student Learning Grant Competition

CRLT coordinates this annual grant competition, consults at least twice with project teams, and works even more intensively with many. About 10 projects each year are led by teams of faculty and graduate students or postdocs who are participating in the body of research known as the scholarship of teaching and learning (SOTL). Projects adhere to the following three criteria: 1) they are inquiry based, posing questions about problems or issues in teaching and learning and exploring practices that promote, deepen, or otherwise improve learning; 2) they use methods appropriate to the discipline in order to find answers to the questions posed; and 3) they are designed to be made public so that results can inform the work of colleagues and the discipline more broadly. Among other avenues, grantees share their results at a poster fair held in conjunction with the keynote address for Enriching Scholarship each May. CRLT provides significant assistance in the presentation of findings and the design of posters. For titles of 2012 grant recipients' projects, please see p. 52. Descriptions of how CRLT worked with grant winners can be found below.

In 2011-2012, proposals that focused on learning experiences suggested by President Coleman's Third Century Initiative (i.e., action-based immersive learning or student development of creative approaches to the world's greatest challenges) were eligible for doubled funding.

The ISL experience and consultations have supported successful teaching innovations, as demonstrated by the fact that two of the five projects receiving the Provost's Teaching Innovation Prize in May 2012 were initially developed with ISL funding.

### 4. Evaluation Research for Education Grants

CRLT staff consulted with faculty applying for internal and external grants in areas related to

curricular and pedagogical innovation. CRLT consultations included pre-proposal evaluation design, assistance on planning and implementing data collection, and support for using evaluation information for decisions about improvement. Faculty sought external grants from agencies such as EDUCAUSE, the Mellon Foundation, the National Science Foundation (NSF), and the Japan Foundation. CRLT's evaluation researcher and other CRLT consultants worked on grant design, implementation, and evaluation issues with a variety of departments, administrators, faculty members, and staff in atmospheric, oceanic, and space sciences; the Center for Japanese Studies; chemical engineering; civil and environmental engineering; ecology and evolutionary biology; materials science and engineering; mechanical engineering; the Molecular and Behavioral Neuroscience Institute; molecular, cellular, and developmental biology; physics; technical communication; and the education.

"Thank you so much for leading our faculty retreat on Saturday! You did an excellent job in summarizing the process, and the key issues, and really generated some great discussion. I appreciate the work you have done for the School. Your scholarly approach to assessment and clear articulation of the major points from the focus groups will help shape our further development of our vision for the new curriculum."

-U-M Associate Dean

#### 5. Michigan Education Through Learning Objects Grant Project Team

For the second year, CRLT is collaborating with a learning community composed of faculty and

graduate students in chemistry, English, history, psychology, and statistics who are working on incorporating "learning objects" (interactive, webbased tools) into their courses. In August 2011, CRLT staff offered a three-hour workshop on developing strategies for using learning analytics and other techniques to evaluate teaching innovations; participating teams implemented their evaluation strategies over the course of the academic year. The statistics and general chemistry teams received a Sloan-C 2012 Effective Practice Award for the "Integration of Technology Into Undergraduate Education via Cross-Disciplinary Pollination." (The Sloan Consortium is an association of individuals, institutions and organizations of higher education committed to quality online education.)

#### 6. Midterm Student Feedback and Course-Level Assessment

CRLT provides confidential, course-level assessment through its midterm student feedback (MSF) service, which allows faculty and GSIs to gather data from students on the effectiveness of their teaching during the term while they still have time to implement changes to improve their courses. In 2011-2012, CRLT conducted MSFs for 393 instructors, allowing more than 14,000 students to provide feedback on the effectiveness of their courses. For more details, see p. 48.

Department, School, and College Assessment Projects

#### 7. Art & Design

In support of a multi-year evaluation of the school's new international experience requirement, CRLT surveyed sophomores about intercultural competence and compared findings with peer institutions. CRLT consultants also analyzed student work and conducted multiple focus groups with faculty and staff. Results were presented to faculty and staff who coordinate the school's international experiences to enhance implementation of the requirement.

#### 8. Business

CRLT staff collaborated with the associate dean for undergraduate programs to facilitate a faculty retreat for review and planning of the undergraduate curriculum. CRLT also consulted with multiple administrators about the development of assessment plans and review of exit surveys, in preparation for the school's upcoming accreditation visit. Additionally, CRLT consulted on a survey about students' and faculty's use of information technology in the classroom, for the technology advisory committee. Finally, in collaboration with the instructor of BA 201: Business Thought and Action, CRLT conducted a longterm assessment of the course, involving surveys and a focus group of students who had taken the class in 2010 and 2011.

#### 9. Dentistry

Following a plan developed in collaboration with the school's assessment committee, CRLT evaluated the school's new undergraduate curriculum by conducting multiple focus groups with undergraduates and faculty and analyzing survey data. Findings were presented to the curriculum committee, the assessment committee, the Pathways group, and at a school-wide retreat to inform curricular enhancements. CRLT staff also consulted on an alumni survey for the online program in dental hygiene and with several other faculty and staff about measurement of student learning outcomes.

#### 10. Education

CRLT staff consulted with Charles Deshimer and Simona Goldin, recipients of a 2011-2012 Investigating Student Learning grant, on their research about the use of video in pre-service student teacher education. Findings were submitted for conference presentations at the American Educational Research Association and the American Association for College Teachers of Educators.

#### 11. Engineering

CRLT conducted a summative evaluation of the National Science Foundation Grant, "A Holistic Assessment of the Ethical Development of Engineering Undergraduates."

Additionally, CRLT staff collaborated with the four Investigating Student Learning (ISL) grant projects received by Engineering faculty. First, CRLT advised on surveys and focus group protocols for Alexander Ganago and Hongwei Liao, recipients of a 2011-2012 Investigating Student Learning ISL Grant. Their project investigated the impact of multidisciplinary team assignments in a required engineering lab course. Jeff Ringenberg and Marcial Lapp also consulted with CRLT for their project, "Predicting Student Achievement in a First-Year Introductory Programming Class," which was presented at the February 22, 2012, "Symposium on Learning Analytics" at U-M and the American Society for Engineering Education 2012 Annual Conference. This project resulted in a diagnostic survey given to all incoming engineering first-year students to assist with placement in the appropriate introductory programming course. New ISL grantees for 2012-2013 were Robin Fowler, who is studying how electronic communication impacts design teams, and Steve Yalisove, who is researching outcomes in a course redesigned for greater active learning. They participated in the 2012 ISL Symposium, which included sessions on methodology for evaluating student learning, an overview of the IRB process, and individual consultations.

#### 12. Kinesiology

For both sport management and movement science programs, CRLT designed and conducted a survey of alumni. Results were shared with program heads, school administrators and key faculty committees to discuss implications for curricular enhancement.

#### 13. Law

CRLT collaborated on an evaluation of the Michigan Access Program, which is designed to foster multicultural leadership skills among incoming first-year law students. Activities included a survey about the impact of a four-day orientation program, mid-year focus group, and end-ofyear survey.

#### 14. LSA: Center for Japanese Studies

CRLT staff helped a faculty member develop an evaluation plan for a grant proposal to fund new graduate student fellowships in an interdisciplinary master's program. The Center succeeded in winning a \$450,000 Institutional Support Grant from the Japan Foundation.

#### 15. LSA: Dean's Office

CRLT consulted with the dean about the evaluation plan and design of a feedback form for the Understanding Race Project, in support of the Winter 2013 theme semester. CRLT also assisted with research design for a study to evaluate the impact of five Michigan Learning Communities on student development and success.

#### 16. LSA: English Language and Literature

In support of their 2011-2012 Investigating Student Learning grant project, "How do students learn to perform close readings of literary texts in a large lecture course?," CRLT consulted with Theresa Tinkle, Daphna Atias, Ruth McAdams, and Cordelia Zukerman. This project won the 2012 Teaching Innovation Prize and has been submitted for publication. Additionally, Rolf Jeremiah Chamberlin, in collaboration with Aaron McCollough (University Library), received a 2012-2013 Investigating Student Learning Grant to examine students' development of information literacy. They participated in the 2012 ISL Symposium, which included sessions on methodology for evaluating student learning, an overview of the IRB process, and individual consultations.

#### 17. LSA: Molecular, Cellular, and Developmental Biology

CRLT staff consulted with Patricia Wittkopp and Lisa Sramkoski about their 2011-2012 Investigating Student Learning project, which analyzed the relationship between online quizzes and student performance in a large genetics course.

#### 18. LSA: Near Eastern Studies

CRLT staff assisted with four surveys of student learning. First, in collaboration with the department, CRLT designed and conducted a survey of students in four introductory courses about their reasons for course selection and experiences in large classes. Additionally, CRLT conducted and analyzed a survey about online learning resources used in ACABS 277. Third, CRLT staff consulted about a feedback survey for evaluation of the Arabic Language Flagship Program. Finally, CRLT staff assisted with data analysis and presentation of findings in a 2011-2012 Investigating Student Learning Grant project by Raji Rammuny, Liana Reading and Spencer Scoville. The research compared Arabic language learning strategies emphasized by faculty and students, as well as heritage and non-heritage speakers.

#### 19. LSA: Psychology

CRLT staff consulted with Richard Gonzalez and Colleen Seifert, recipients of a 2011-2012 Investigating Student Learning Grant, on their project, "Assessing Deep Knowledge of Statistical Concepts."

#### 20. LSA: Program in the Environment

Rolf Bouma received a 2012-2013 Investigating Student Learning Grant to investigate the impact of a redesigned course on students' ethical learning. He participated in the 2012 ISL Symposium, which included sessions on methodology for evaluating student learning, an overview of the IRB process, and individual consultations. Additionally, CRLT staff consulted with him on the evaluation design for the project.

#### 21. LSA: Physics

As part of an initiative about student learning in gateway courses, CRLT staff conducted interviews and surveyed undergraduates about their approach to studying physics. The project determined which study strategies were used by students who performed better- or worse-thanpredicted on the basis of the department's learner analytics model. This preliminary research is in support of two grants: a Stage II Whitaker grant funded by the Office of the Provost and an EDUCAUSE Next Generation Learning Challenge Grant. The research informed the e2Coach intervention to enhance student success in introductory physics. CRLT will be presenting interview and survey findings at the 2012 POD Network Conference, and Physics presented the e2Coach model at the 2012 Annual Conference on Learning Analytics and Knowledge.

#### 22. LSA: Sweetland Center for Writing

CRLT facilitated four focus groups and presented a report of the findings in support of assessment of the Upper-Level Writing Requirement (ULWR). Additionally, CRLT staff consulted with Louis Ciciarelli and Paul Barron, recipients of a 2011-2012 Investigating Student Learning Grant, on their evaluation of the Dissertation Writing Institute.

#### 23. LSA: Women's Studies

Leseliey Rose Welch received a 2012-2013 Investigating Student Learning Grant to investigate leaning outcomes in two service learning courses. She participated in the 2012 ISL Symposium – which included sessions on methodology for evaluating student learning, an overview of the IRB process, and individual consultations – and CRLT staff assisted with her literature review and data entry.

#### 24. Medicine

CRLT staff consulted with the Molecular and Behavioral Neuroscience Institute about assessment tools for a National Science Foundation grant. Additionally, CRLT staff consulted with three Investigating Student Learning (ISL) grant recipients. Michael Hortsch received a 2011-2012 ISL grant to document student use of online and traditional learning resources in a histology course. This project was presented at the 2011 Medical Education Day and is currently being submitted to a medical education journal. Helen Morgan and Karen McLean received a 2012-2013 Investigating Student Learning grant to investigate the impact of flipped classrooms in obstetrics and gynecology. They participated in the 2012 ISL Symposium, which included sessions on methodology for evaluating student learning, an overview of the IRB process, and individual consultations.

#### 25. Music, Theatre and Dance

CRLT staff consulted with John Ellis and Jani Parsons, recipients of a 2011-2012 Investigating Student Learning grant, on their research about the effects of mindfulness techniques and instructional technology on college class piano assessments. CRLT assisted with data analysis and presentation of results in a May 2012 poster fair.

# 26. Natural Resources and Environment CRLT consulted with the dean about assessment.

#### 27. Nursing

CRLT consulted with a faculty member on ways to evaluate the revised approach to clinical placements for undergraduate students. Also, Laurie Hartman and Cynthia Fenske received a 2012-2013 Investigating Student Learning grant to investigate the impact of video patient care simulations on clinical judgment skills of nursing and nurse practitioner students. They participated in the 2012 ISL Symposium, which included sessions on methodology for evaluating student learning, an overview of the IRB process, and individual consultations.

#### 28. Pharmacy

CRLT assisted with a literature review to inform the school's assessment plan for a new, team-based learning curriculum and evaluated the conversion of P430: Nonprescription Therapeutics and Self-Care from a large lecture course to one structured around team-based learning. In addition, CRLT consulted on an exit survey for graduating PharmD students.

#### 29. Public Health

CRLT consulted with health management and policy about curriculum mapping, development of an assessment plan, and review of an exit survey. Additionally, for the new interdisciplinary PH 600 course, CRLT staff consulted on evaluation strategies. For this course and the health behavior and health education capstone course, CRLT collected and analyzed student feedback.

#### 30. Public Policy

CRLT staff assisted with ongoing curricular review and strategic assessment at the school. Services included design and analysis of focus groups with MPP students to gauge the depth and nature of their engagement with the school, as well as consultation on the design of an MPP exit survey and facilitation of a faculty retreat on the results of the survey and focus groups.

#### 31. Rackham Graduate School

CRLT staff made site visits to Kalamazoo and Oberlin Colleges in order to evaluate the Mellon postdoctoral fellowships. In collaboration with the Dean's office, CRLT conducted an evaluation of the Preparing Future Faculty Conference to determine how the program could better meet the needs of graduate students, particularly in the humanities. CRLT gathered data by conducting interviews with 12 graduate chairs from humanities departments, as well as by facilitating two focus groups with graduate students. As a result of these efforts, CRLT plans to hold the event earlier in the semester, create a variety of online resources, and include new sessions targeted to the needs of graduate students in the humanities.

#### 32. Social Work

Leslie Hollingsworth received a 2012-2013 Investigating Student Learning grant to examine learning outcomes from a course on Africentric social work practice. She participated in the 2012 ISL Symposium, which included sessions on methodology for evaluating student learning, an overview of the IRB process, and individual consultations.

#### Other Units

#### 33. Libraries

CRLT staff consulted on the assessment of information literacy learning modules for English 125.

# 34. Graham Environmental Sustainability Institute

CRLT staff provided feedback in a draft manuscript on an evaluation study about a course on sustainability. The article was published in a 2012 issue of the Journal of Environmental Studies and Science.

#### **CRLT Research**

Over the past several years, CRLT has expanded its research efforts, and CRLT staff members (including associate and assistant research scientists and a research associate professor) are pursuing several projects on teaching and learning topics of particular relevance to faculty and graduate students at U-M.

# Student Learning Analytics in Introductory Science Courses

Learning Analytics – based on the idea that large existing academic datasets can be used to improve the learning experience – is a growing trend in higher education. CRLT collaborated with a research team from physics that analyzed university records to create a model of student success. CRLT interviewed students who performed better and worse than predicted about their study habits and also surveyed students who serve as undergraduate peer leaders at the Science Learning Center. Funded by an EDUCAUSE Next Generation Learning Grant, the physics used these findings to develop a customized online learning support system for introductory physics, E2Coach.

# Faculty Preparedness for Blended Teaching (Flipped Classrooms)

This project investigates faculty attitudes about the effectiveness of blending face-to-face and online modes of instruction for both faculty development and teaching. Although CRLT has used blended teaching for postdoc audiences since 2009, its first blended sessions for faculty audiences were held in 2012: a four-seminar series open to faculty from across campus and a three-day digital institute for nursing faculty. Pre- and post-surveys were taken by both groups to determine how faculty development delivered in a blended format affects a) participants' selfassessment of their readiness to design and teach blended courses, and b) their attitudes about the effectiveness of this mode of instruction. Results from this study will inform future programming

on the subject of blended and online teaching, as well as CRLT's use of the blended format for faculty development. Data will also be presented at the Professional and Organizational Development (POD) Network Conference in Fall 2012.

# Faculty Teaching Practices That Support Student Success

In the second year of this NSF-funded project, a survey was administered to 386 engineering undergraduate students regarding teaching practices that positively impact or inhibit student success. Focus groups about teaching practices were conducted with academic advisors and student survey respondents. A random sample of engineering faculty also participated in focus groups about factors that influence instructors' motivation to adopt research-based, effective practices. The project has resulted in two conference papers and a poster presentation. It will culminate in the development and presentation of evidence-based workshops modeled after other successful change initiatives.

# Activities That Promote Ethical Development of Engineering Undergraduates

In the fourth and final year of this NSF-funded project investigating the impact of formal and informal activities in the engineering curriculum upon students' ethical development, CRLT staff shared findings from a survey of 3,914 undergraduate engineering students. A key finding is that the level of complexity of ethics instruction is more influential than the amount of ethics instruction. Results were shared at several regional ethics workshops, as well as with internal audiences. Further dissemination has included three refereed articles, five conference presentations, and four poster presentations. NSF has funded the next stages of this research, which will develop a practical assessment metric for use by engineering educators nationally.

# 5. Active Learning in Engineering: Perspectives of Engineering GSIs

This study examines engineering GSIs' perceptions of active learning teaching methods. GSIs were surveyed regarding their teaching responsibilities, methods, resources, and values, as well as number of semesters taught. Most reported valuing "good teaching" and felt prepared to use active learning teaching methods in their classes. Respondents who did not use active learning methods either believed their teaching responsibilities did not allow their use or that active learning was not necessary. Further analysis of the data will assess how GSIs' teaching responsibilities and interactions with engineering teaching consultants influence decisions to incorporate active learning into teaching practice. Results of this study will be submitted for inclusion in a teaching assistant development journal and an engineering education conference.

# 6. Developmental Stages of New Instructional Consultants: Implications for Professional Training

This project addresses the question of how those new to the field of faculty development grow as instructional consultants. The research focuses on CRLT's graduate teaching consultants (GTCs), graduate students hired by CRLT to work with fellow GSIs across campus. GTCs receive training in consultation skills, including collecting midterm student feedback and observing classes, and they participate in a two-semester professional development seminar. Data used to analyze GTC growth and development included surveys of GTCs at both the start and end of the program, GTC self-assessment essays collected mid-way through the seminar, and feedback from GSIs with whom GTCs consulted. Data collection began in Fall 2010 and is continuing through Fall 2012. Preliminary results of this study have informed the GTC program and were presented at the 2011 annual meeting of the POD Network.

# 7. Preparing Future Faculty: Inventories of Mentorship Programs and Teaching Grants/Awards

Forthcoming in Studies in Graduate and Professional Student Development is an inventory of 46 U.S. mentorship programs for graduate students and postdoctoral scholars that makes recommendations for future development of these initiatives. A second inventory, also submitted to *Studies*, documents criteria for graduate and postdoctoral teaching grants and awards at 21 doctorate-granting institutions. The study compares the frequency of teaching grants that are prospective in scope and teaching awards that retrospectively recognize previous accomplishments. Both projects help CRLT benchmark its own professional development efforts to prepare future faculty.

# Content and Process of a Twitter Backchannel at an Academic Conference

CRLT participated in a cross-institutional collaboration that analyzed how participants used Twitter to communicate about the 2011 joint meeting of the POD Network and the Historically Black Colleges and Universities Faculty Development Network. Findings from coding all plenary session tweets indicated that a backchannel at an academic conference can serve important communicative functions, developing social networks and promoting the sharing of resources. The study also revealed that the medium led to a wider set of issues being raised than might have been anticipated based on prior surveys of the field. An article about this research will appear in the journal To Improve the Academy.

# Faculty and GSI Orientations

# New Faculty Orientation

In conjunction with the Provost and Executive Vice President for Academic Affairs, CRLT organized and facilitated the campus-wide New Faculty Orientation. In August 2011, 165 faculty members registered for this event. During the program, the President, Senior Vice Provost, and Vice President for Research welcomed the new faculty and described various services. Participants attended sessions that focused on teaching, including the following topics:

- •Interactive Theatre: The First Class
- •Student Teams in the Classroom
- Research on Best Practices in College Teaching
- Using Instructional Technology to Enhance Teaching

The New Faculty Orientation concluded with an Information Fair. The fair featured exhibits and representatives from approximately 41 U-M offices and programs. Faculty also had an opportunity to purchase parking permits

# GSI Teaching Orientations

CRLT organized and facilitated a university-wide Graduate Student Instructor Teaching Orientation at the beginning of the Fall 2011 and Winter 2012 terms. This past year, 370 GSIs attended the Fall program and 120 GSIs attended the Winter program. During these orientations, each GSI was given the



opportunity to practice a 5-minute lesson and receive feedback from peers and an experienced instructor or CRLT staff member. New GSIs also engaged in discussions about the role of GSIs at the University of Michigan, collected resources related to this role, consulted experienced GSIs, and participated in workshops designed to address key issues. The orientation included the following workshops:

- Classroom Communication at II-M
- Dealing with Controversy During Classroom Discussion
- Evaluating Student Writing
- Facilitating Discussions in the Social Sciences
- Facilitating Discussions in the Humanities
- Facilitating Discussions in Psychology
- Facilitating Group Work to Maximize Learning in Labs
- Getting Started: GSIs Teaching Graduate Students
- •Getting Started: GSIs Teaching Undergraduate Students
- Grading in Quantitative Courses and the Sciences
- •How Can CTools Help Me Teach Effectively as a GSI?
- Identity and Multicultural Issues in the Classroom
- •Interactive Theatre: First Class

- Leading Problem Solving SessionsOne-to-One Teaching in Music,
- Art, Dance, and Architecture
- Teaching Foreign Language
   Courses

CRLT also organized a customized teaching orientation program for new GSIs in the college of engineering in Fall 2011 and Winter 2012. After an initial day of training, the GSIs returned for an advanced session during which they practiced using active learning techniques in their teaching. For the first time, CRLT offered a separate orientation for undergraduate instructional aides (IAs) each semester. The GSI orientations in engineering served 201 attendees and the IA orientations, 133.

#### **ELI-CRLT Courses**

In collaboration with English Language Institute (ELI), CRLT co-sponsors two intensive courses for graduate students whose undergraduate education was in a language other than English and who plan to have GSI appointments in LSA. One course is offered in August to incoming U-M students who have recently arrived in the country; the other is a ten-week, winter-term course for those who are already graduate students. Both address language proficiency, pedagogical strategies, and cultural awareness. In August 2011, 28 international graduate students participated in the course, and during Winter 2012, 25 more students participated.

# Faculty and GSI Seminars and Programs

# Campus-Wide Seminar Series

During the Fall 2011 and Winter 2012 terms, CRLT offered seminars and programs for faculty, graduate students, and postdocs. These campus-wide programs brought instructors together to share ideas across disciplines. They also helped instructors develop and improve their teaching skills, expand their repertoire of teaching methods, and gain new perspectives on teaching at U-M. CRLT professional staff, faculty members from other units of the University, and guest presenters from other universities conducted CRLT seminars. In 2011-2012, 901 faculty, graduate students, and postdocs registered for all seminars, including the following programs:

(\* presented to graduate students and postdocs only, \*\* presented to faculty only)

- A Multicultural Strategy for Engaging Students in Courses with Extensive Readings
- Blended Teaching: Combining Face-to-Face and Online Learnina (four sessions)\*\*
- Blogging in the Classroom (Cosponsored by the Sweetland Center for Writing)
- CRLT Players: (dis) Ability in the Classroom
- · Designing and Managing Student Presentations
- Effective Lecturing
- Enriching Student Scholarship: Improving Research Assignments and the Sources Students Cite
- Facilitating Classroom Discussions in the Social Sciences and the

- Humanities\*
- Faculty Reading Group in Student Learning: Novice vs. Expert Learners\*\*
- Faculty Reading Group in Student Learning: Recall and Learning\*\*
- Faculty Reading Group in Student Learning: Student Cognitive Development\*\*
- High Impact Practices: Collaboration and Team Work
- Now That I Have It, What Grade Should I Give It? Evaluating Student Writing
- Preparing Future Faculty Conference: Getting Ready for an Academic Career
- The Role of Authority and Identity in Teaching

- Six-Session Training for Multicultural Classroom Facilitation\*
- Research on Plagiarism, Cheating, and Student Ethical Development
- Theme Semester Roundtable on Less Commonly Taught Languages
- Using Case Studies Across the Disciplines\*\*
- Using Screencasting Technology to Engage Students and Gauge Their **Understanding**
- What's It Like to Be an Academic Administrator?\*
- What's It Like to Work at a Liberal Arts College?\*
- What's It Like to Have a STEM Career at Different Types of Universities?\*

# CRLT in Engineering Seminar Series

During the Fall 2011 and Winter 2012 terms 423 engineering faculty, graduate students, and postdocs registered for the following programs and seminars offered by CRLT in Engineering: (\* presented to graduate students and postdocs only, \*\* presented to faculty only)

- Are They "Getting it?" Low-Stakes Ways Inspiring the Entrepreneurial Mindset in to Assess Student Learning\*
- Best Teaching Practices: Perspectives from Experienced GSIs\*
- Education Research in the College of Engineering: Who's Doing What?
- Ethical Development in Engineering Undergraduates: Research Findings\*\*\*
- the Classroom\*\*
- Instructional Technology in Engineering Courses: A Faculty Panel\*\*
- The Key to an Impressive Academic Job Application: Your Teaching Philosophy Statement
- Research-Based Principles for Making Learning Work
- Seven (Simple) Strategies to Improve Your Teaching
- Sixth Annual Research and Scholarship in Engineering Education Poster Fair
- Using Concept Questions to Engage Students and Check Their Progress\*\*
- Your Advisor: The Collaborator, the Senior Scientist, or the Hands-Off Supervisor?\*

# **Programs for Faculty**

# Provost's Campus Leadership Program (PCLP)

On behalf of the Provost, CRLT coordinates an academic leadership program with two parts: first, PCLP orients new department chairs and associate deans with a day-long program, and second, PCLP provides ongoing professional development for all chairs and associate deans with periodic roundtable sessions. Roundtable topics in 2011-2012 included running good meetings and working successfully with staff colleagues. Additionally, the Provost shared his priorities and his perspective on U-M's strengths amid the challenges facing higher education.

The programs were well attended, with 97% of new department chairs and 91% of new associate deans participating in at least one of the leadership events.

# Provost's Seminars on Teaching

Since 1996, CRLT has worked with the Office of the Provost to organize semi-annual Provost's Seminars on Teaching. The Provost's Seminars promote lively and substantive dialogues about a wide range of teaching and learning issues relevant to the entire campus.

In November 2011, 88 faculty attended Teaching with Collections: Engaging Students in the Archives, Museums, and Gardens of the University of Michigan. CRLT's long-time collaboration with the U-M Cultural Collections Council, previously the Public Goods Council, informed the design of this event. The Council offered excellent ideas and participated in the planning, as did curators and educators. Plenary talks by Francis Blouin, Director of the Bentley Library, and Provost Phil Hanlon were followed by two sets of concurrent sessions. First, a curator from each museum or archive brought materials from the collection and led a workshop to engage faculty participants as though they were students. At the second set of concurrent sessions, cross-disciplinary panels of U-M faculty discussed their use of specific teaching strategies, focusing on the power of very concrete images and materials to illuminate complex ideas.

"The orientation presented a good overview of these roles as well as practical advice. It also provided more information about resources within the university that I will use in the future. Connecting with new colleagues was another major benefit. Thank you so much!"

"I feel that I gained tips, insight, and information from these sessions. I especially appreciated hearing from the 3 relatively new chairs – their insight was incredibly helpful for me.

–Participants in the Orientation for New Department Chairs and Associate Deans

CRLT's 50th anniversary celebration took the place of a spring Provost's Seminar. It brought together 350 U-M faculty and graduate students along with visitors from 27 other campuses to hear from the president and provost, and to share ideas at a gallery of teaching innovations (for more information see New Initiatives, p. 24).

# International Faculty Dinner

With support from the Office of the Senior Vice Provost for Academic Affairs, CRLT hosted the eleventh annual International Faculty Dinner in February 2012. This event provided an opportunity for 161 faculty with an international background to socialize and exchange perspectives on teaching at U-M.

# Programs for New Faculty

LSA Teaching Academy: For the third year, CRLT collaborated with the LSA dean's office to offer a teaching academy for all new assistant professors in the college. A two-day program in late August introduced the 20 new faculty to senior LSA colleagues and engaged them in topics such as the diversity of U-M students' backgrounds, course design and planning, teaching large courses, instructional technology, and graduate teaching and mentoring. In addition, participants had the opportunity to deliver a practice lesson and receive feedback on their teaching. Over the course of the academic year, faculty attended additional workshops on teaching. During their first semester in the classroom, new faculty also participated in CRLT's midterm student feedback program. Faculty were asked to rate their confidence on a number of aspects of teaching both before and after the teaching academy, and results indicated that their confidence increased significantly on topics covered by the academy.

Health Sciences Teaching Academy: In collaboration with the deans of dentistry, kinesiology, medicine, nursing, pharmacy, public health, and social work, CRLT offered a health sciences teaching academy for new assistant and clinical assistant professors in these units. (For more information, see New Initiatives, p. 26)

College of Engineering Programs: Immediately following the campus-wide new faculty orientation (p. 40), CRLT in Engineering provided additional programming for faculty new to the college. A panel of experienced faculty discussed teaching in the college, and new faculty had the opportunity to deliver a practice lesson and receive feedback on their teaching. Subsequent programs covered strategies for new faculty success, how to prepare an NSF Career Proposal, and occasions for networking both within the new cohort and with experienced faculty.

# ▶ Faculty Learning Communities

Google Faculty Learning Community: Over the fall and winter terms, CRLT and the office of Information and Technology Services (ITS) co-sponsored a faculty learning community to explore the potential of the Google online collaboration tools to enhance teaching and student learning at U-M. (For more information, see New Initiatives, p. 25)

**Engineering Programs:** CRLT in Engineering created multiple opportunities for faculty who are pursuing engineering education research to network and share data, refine research ideas, participate in the Annual Research and Scholarship in Engineering Education Poster Sessions, and mentor graduate students pursuing the Rackham Certificate Program in Engineering Education Research. The program awarded its first certificate in the 2011-2012 academic year. CRLT in Engineering launched a separate initiative for faculty in Winter 2012, a Teaching Circle for Large Engineering Courses. (For more information, see New Initiatives, p. 26)

# Programs for Graduate Students and Postdoctoral Scholars

# ▶ U-M Graduate Teacher Certificate Program

In collaboration with the Rackham Graduate School, CRLT runs a U-M Graduate Teacher Certificate Program designed to assist GSIs with marketing their professional development as college-level instructors. Since October 2007, this program has offered graduate students an advantage in the academic job market by helping them document their preparation for their junior faculty teaching roles. The program also emphasizes the importance of teacher preparation in helping graduates gain faculty positions. Graduate students who wish to participate submit required documents and track their progress toward completion of the program on a webbased interface designed by CRLT. Program requirements include participation in a teaching orientation and ongoing seminars on teaching, classroom teaching experience, a teaching mentorship, and the submission of a statement of teaching philosophy.

Participation continued to increase during the 2011-2012 academic year. Specifically, 120 more graduate students enrolled, bringing the total number of participants to 594. This year 47 students completed the certificate requirements. Since the program's inception, CRLT has awarded a total of 199 certificates.

# Preparing Future Faculty Programs

In 2011-2012, CRLT offered four Preparing Future Faculty (*PFF*) programs, all in collaboration with the Rackham School of Graduate Studies.

The fourth iteration of the seven-session *Postdoctoral Short-Course on College Teaching in Science and Engineering* was conducted in Fall 2011 for 34 postdoctoral scholars. The course models "blended learning" (the flipped classroom) and emphasizes advance preparation using video podcasts and readings so that time during sessions is devoted to active learning and reflection. Each participant has multiple opportunities to present a lesson to colleagues, develop a lesson plan for an inquiry-based lab exercise, and design a syllabus for a course to be taught in the future.

The *Intercampus Mentorship Program* connects faculty at nearby colleges with U-M graduate students and post-doctoral scholars. New institutions at which faculty served as mentors included Calvin College, Hope College, and the New York Historical Society. Twenty-four students and postdocs were funded to take part in a mentorship, which

"I'm writing because I just found out the great news that I won a national award for teaching and learning — the K. Patricia Cross Future Leaders Award from AAC&U. I think a major reason why I won it was that PFF gave me the tools to write about my teaching with greater sophistication and purpose. I just wanted to thank you for putting together such an amazing program!"

– PFF Seminar Participant

involved activities such as campus visits, discussions of the academic job search, and guest teaching. The participants were from six schools and colleges (engineering; law; LSA; medicine; music, theatre and dance, and public health) and represented 11 LSA departments. In an associated initiative, CRLT also worked with Rackham to coordinate three Mellon Foundation-funded postdoctoral teaching appointments at Kalamazoo and Oberlin Colleges.

The thirteenth annual *Rackham-CRLT Seminar on College Teaching: Preparing Future Faculty* took place in May 2012, with funding provided by the Provost's Office and Rackham. CRLT's instructional consultants taught the seminar and invited faculty from across the campus to speak. Ninety-seven advanced graduate students applied, and CRLT accepted 56 as participants. The applicants represented 12 schools and colleges (architecture and urban planning; business; dentristy; education; engineering; LSA; medicine; music, theatre and dance; natural resources and environment; pharmacy; public health; and social work, as well as the Institute for Social Research's Program in Survey Methodology) and included 22 LSA departments and programs.

The Seminar covered three major areas:

- Preparation for the academic job search, including assistance with the creation of a statement of teaching philosophy and a syllabus
- Information about higher education (e.g., institutional 2) types, the nature of today's students, tenure, and faculty worklife)
- Discussion of effective and reflective teaching, includ-3) ing meetings with University of Michigan junior faculty, conversations about multicultural teaching and learning, and demonstration of and reflection on the use of instructional technology

The Seminar also included an introduction to different types of institutions through a trip to one of four local campuses: Albion College, Eastern Michigan University, Kalamazoo College, or the University of Toledo. Those who successfully completed all requirements of the seminar received a certificate.

The eighth annual Preparing Future Faculty Conference cosponsored by Rackham and the Career Center, took place in October 2011. More than 514 graduate students registered for this one-day conference, which included the following break-out sessions:

"I had a wonderful experience in PFF. It got me inspired and excited about a career in academia. Actually, I credit it with lighting a fire under me to finish my dissertation, as I realized what I really wanted was to be a faculty member, not a grad student! Well, it has worked, and I will be defending my dissertation in July. Also, I was very fortunate to be able to secure a tenure-track position"

-PFF Seminar Participant

- Academic Job Search Strategies for International Students
- Developing Your Teaching Philosophy
- Dual Career Issues and Faculty Work-Life Balance
- Starting and Running a Research Lab
- Hit the Ground Running With Your Academic Career
- Interviewing for the Academy
- Navigating a Challenging Academic Job Market
- · Negotiating an Academic Job Offer in Science, Technology, Engineering, and Math Fields
- Negotiating an Academic Job Offer in the Humanities and Social Sciences
- The Tenure-Track Process and Faculty Worklife
- What's It Like to Be an Academic Administrator?
- What's It Like to Have a STEM Career in Different Types of Universities?

# Graduate Teaching Consultants Program

CRLT's graduate teaching consultants (*GTCs*) are selected in a campus-wide competition. CRLT prepares the GTCs to consult with GSIs about their teaching during the upcoming academic year. GTCs draw on their knowledge and experience to help support GSIs, while learning more themselves about teaching and learning. All GTCs receive training in observing and videotaping classes, giving constructive feedback on teaching, collecting student feedback about teaching, and evaluating statements of teaching philosophy. GTCs collaborate with CRLT instructional consultants on activities designed to promote excellence in graduate student teaching across the university. For instance, GTCs plan and conduct sessions at the fall and winter teaching orientations for new GSIs.

In May 2009, additional GTC positions were created to focus on instructional technology. The instructional technology graduate teaching consultants (*IT-GTCs*) demonstrate effective uses of technology at fall GSI orientations and throughout the semester.

## Graduate teaching consultants, 2011-2012

- \* Yanina Arnold, Slavic Languages and Literatures
- \* Daphna Atias, English Language and Literature
- \* Emily Bonem, Psychology
- \* Aleah Burson, Psychology
- \* Andre Cavalcante, Communication Studies
- \* Sara Crider, Social Work and Sociology
- \* Steven Engel, English Language and Literature
- \* Chris Gerben, Joint Program in English and Education
- \* Dana Jackman, Natural Resources and Environment and Economics
- \* Alex Jakle, Political Science
- \* Minal Patel, Public Health
- \* Melody Pugh, Joint Program in English and Education
- \* Kristine Schutz, Education
- \* Natalie Sampson, Public Health
- \* George Smith, Psychology
- \* Kathryn Will, English Language and Literature

#### Instructional technology graduate teaching consultants, 2011-2012

- \* Emily Bonem, Psychology
- \* Andre Cavalcante, Communication Studies
- \* Steve Engel, Joint Program in English and Education
- \* Chris Gerben, Joint Program in English and Education
- \* Dana Jackman, Natural Resources and Environment and Economics

# Engineering Teaching Consultants Program

Engineering teaching consultants (ETCs) are selected in a college-wide competition each semester, and CRLT prepares them to consult with engineering GSIs. They conduct midterm feedback sessions for several hundred undergraduate engineering students. They also plan and conduct sessions at the fall and winter engineering GSI teacher trainings, as well as workshops in the CRLT in Engineering Seminar Series.

#### Engineering graduate student mentors, 2011-2012

- \* Christine Andres, Chemical Engineering
- \* Stephen Cain, Biomedical Engineering
- \* Branden Clements, Civil and Environmental Engineering
- \* Fikadu Dagefu, Electrical Engineering and Computer Science
- \* Jennifer Dibbern, Materials Science and Engineering
- \* Steven Edmund, Chemical Engineering
- \* Jin Hu, Electrical Engineering and Computer Science
- \* Hongwei Liao, Electrical Engineering and Computer Science
- \* Sameer Parvathikar, Chemical Engineering
- \* Elizabeth Stewart, Chemical Engineering
- \* Marie Ternes, Chemical Engineering
- \* Sean Torrez, Aerospace Engineering
- \* Yi-Chin Wu, Electrical Engineering and Computer Science

# Departmental GSI Training and Development

Individual departments are responsible for training their new GSIs, and CRLT staff members help departments across the university to develop, improve, and evaluate their programs. Within departments, both faculty GSI coordinators and graduate student mentors (experienced GSIs) develop, facilitate, and assess departmental training programs for new GSIs and also consult with individual GSIs on a one-to-one basis. During Summer 2011, Fall 2011, and Winter 2012, CRLT developed and conducted several sessions to help faculty coordinators and GSMs prepare for their roles and exchange resources. Workshop topics included running practice teaching sessions, observing classes and offering feedback, strategies for working with GSIs, issues in consulting, and conducting midterm student feedback sessions. CRLT also organized gatherings for GSI trainers and graduate student mentors.

# Consultation Services for Individual Instructors

#### Consultations

CRLT professional staff and GTCs provide consultation services to faculty, graduate students, and administrators. Short consultations often involve requests for materials, information, and advice about campus resources for teaching and learning. Topics for more intensive consultations include curricular and instructional matters such as course design, integrating innovative approaches to teaching and learning, interpretation of student ratings, and improvement of teaching and learning in a class or discipline. CRLT staff conducted over 2,200 individual consultations, some brief and some extensive, with U-M clients during the 2011-2012 academic year.

#### Midterm Student Feedback

CRLT collects student feedback for faculty and GSIs who wish to assess and improve their teaching during the term. A CRLT consultant observes the class and then confers with the students about what is going well and what changes would improve their learning. The consultant later meets with the instructor to report findings and discuss strategies for change. Faculty in charge of large, multi-section courses also use this service to gain an overview of the course. Section leaders receive confidential individual feedback and the supervising faculty member receives a report of overall trends in the course that can be used to facilitate and inform curricular improvement. During the 2011-2012 academic year, CRLT staff conducted midterm student feedback sessions for 393 faculty and GSIs across campus. These sessions provided an opportunity for more than 14,500 undergraduate and graduate students to share feedback in the middle of the term, when classroom changes could directly benefit their learning experience.

What people
are saying
about Consultations
and Midterm Student
Feedback

"The CRLT consultant's assistance was terrific! Besides helping me think things through and sending me a valuable article, she gave me ideas or feedback on ideas that I implemented. The course wound up being one of the best I've taught. Thank you very much for your time and expertise."

"I used the MSF service for a course that I was teaching for the sixth time. Even though I was comfortable with the way I had taught the course, the program encouraged me to make simple but important changes that I know had a big impact on the students. I have recommended this service to all of my colleagues, whether they are junior or senior."

"Thanks again for the midterm student feedback help! It really changed the way that I both structured my class and interacted with my students. I truly appreciate it!"

# Grants and Awards Competitions



In 2011-2012, CRLT administered seven grants competitions for faculty to improve teaching and learning at the University of Michigan. The Office of the Provost and Executive Vice President for Academic Affairs funded three competitions: Stages I and II of the Gilbert Whitaker Fund for the Improvement of Teaching and the Lecturers' Professional Development Grants. CRLT directly funded four competitions: the Faculty Development Fund (FDF), the Instructional Development Fund, and the Teaching with Technology Institute. The Investigating Student Learning (ISL) Grant is funded jointly by the Provost's Office and CRLT. In addition, CRLT administered the Provost's Teaching Innovation Prize (TIP), designed to recognize outstanding pedagogical practices. A total of

105 faculty received grants or awards totaling more than \$330,000.

For these competitions, CRLT staff prepared and sent guidelines, consulted with grant applicants, prepared applications for internal and external review, reviewed and rated applications, facilitated faculty review panel meetings, sent letters to applicants, created accounts for grant recipients, guided grant recipients on their projects when requested, consulted with applicants who did not receive awards, and collected project reports.

After reviewing CRLT staff comments, CRLT's faculty advisory board members selected grantees for the Faculty Development Fund and the Investigating Student Learning Grant. The Advisory Board recommended awardees to the Provost for the Gilbert Whitaker Fund for the Improvement of Teaching (for Stages I and II of funding). A panel of experienced lecturers made recommendations to the Provost on proposals for the Lecturers' Professional Development Grants. CRLT staff selected grant recipients for the Instructional Development Fund. U-M instructional technology consultants assisted with selection of grantees for the Teaching with Technology Institute. For the Provost's Teaching Innovation Prize, a panel of award-winning faculty selected recipients.

# Provost's Teaching Innovation Prize (TIP)

The Provost's Teaching Innovation Prize was created and funded jointly by the provost's office, the university library, and CRLT. TIP recognizes faculty who have developed innovative approaches to teaching that incorporate creative pedagogies, and it encourages the dissemination of best practices by sharing promising innovations with faculty more broadly. In 2012, five teaching innovations were chosen from among 77 faculty nominees. Winning faculty received a \$5,000 award for their original approaches to teaching and creativity in the classroom.

### Provost's Teaching Innovation Prize Recipients, Winter 2012

- 1. Omolola Eniola-Adefeso, Chemical Engineering Experiencing "True Engineering" Earlier: Learning Concepts by Teaching to High School Students
- Timothy McKay, Physics and Astronomy, David Gerdes, Physics, and August Evrard, Physics and

Better than Expected: Using Tailored Communication to Optimize Learning

#### 3. Joanna Mirecki Millunchick, Materials Science and Engineering

High Return on Faculty Investment: Addressing Diverse Student Needs in Large Lectures Through Screencasting

#### 4. Kathleen Sienko, Mechanical Engineering and Biomedical Engineering

Co-Creative, Immersion-Based Design for Global Health

### 5. Theresa Tinkle, English Language and Literature

Teaching Smarter, Not Harder: Improving Students' Close Reading Skills Through Interactivity

# Gilbert Whitaker Fund for the Improvement of Teaching

The office of the provost finances the improvement of teaching through the Gilbert Whitaker Fund, which is administered by CRLT. The Provost awards funds in two stages to departments, programs, and groups of faculty. Stage I provides up to eight initial grants of up to \$10,000 for project development and preliminary implementation. A year later, Stage I-funded recipients report on their achievements and submit proposals for a Stage II project. On the basis of these reports and proposals, the provost awards Stage II grants of \$15,000 for applicants to continue their project development and implementation.

#### Gilbert Whitaker Fund for the Improvement of Teaching Recipients (Stage II, Fall 2010)

# 1. Cynthia Pachikara, Art and Design and Tsz Yan Ng, Architecture

Sculpting Light Sculpting Space

#### 2. Michelle Aebersold, Nursing

Redesigning Clinical Skills Training through Technology

# Gilbert Whitaker Fund for the Improvement of Teaching Recipients (Stage I, Winter 2012)

#### 1. David Chesney, Electrical Engineering and Computer Science

Microsoft Kinect Platform for Game and App Development for Patients with Autism

#### 2. Amy Cohn, Industrial and Operations Engineering and Michelle Lea Macy, Medicine

Developing a Framework for Hands-On Collaborations between Engineering and Medical Students on Open-Ended Projects

#### 3. Debi Khasnabis and Cathy Reischl, *Education*

Scarlett Middle School Summer Program for ESL Teaching Interns and Adolescent English Language Learners

#### 4. Lori McMann, Kathy Meyer, and Lorrel Sullivan, Romance Languages and Literatures

Revision of Elementary French Curriculum

#### 5. Christi Merrill, Comparative Literature

Faculty Seminar on Critical Issues in the Translation Classroom

#### 6. Seetha Monrad and Lisa DiPonio, *Internal Medicine*

Longitudinal Musculoskeletal Education for Medical Students

#### 7. Christopher Poulsen and Greg Dick, Earth and Environmental Sciences

Enriching Undergraduate Environmental Science Education in the Rockies

#### 8. Mary Ruffolo, Social Work

Leveraging Technology to Develop Collaborative Communities of Inquiry in Social Work Education

# Faculty Development Fund

This fund provides grants for innovative projects that enhance teaching and learning. CRLT awards up to \$6,000 to individual faculty members or small groups of faculty who propose innovative revisions to courses or innovative course development (e.g., interdisciplinary courses), or who initiate other projects that improve the learning of a relatively small number of students. Grant awards up to \$10,000 are available to departments, programs, and other large faculty groups who want to collaborate on more extensive projects, such as curriculum development and evaluation, inclusive classrooms, novel applications and evaluations of instructional technology, non-traditional approaches to teaching, and GSI mentorship and training programs.

#### Faculty Development Fund Recipients, Fall 2011

#### 1. Eric Bell, Astronomy

Flipping' the Big Bang - Implementing Active and Blended Learning in an Introductory-Level Cosmology Course

#### 2. Charles Dershimer, Education

Secondary MAC Program Educative Mentoring Professional Development for Field Instructors and Mentor Teachers

#### 3. Helen Fox, Residential College

Race and Racism in Post-Racial America

#### 4. Michael Gurevich, Music, Theatre, and Dance

Physical Computing for the Performing Arts

## 5. Michael Hopkins, Music, Theatre, and Dance

String Pedagogy Online Learning Community

#### 6. Sharon Kileny, Jocelyn Schiller, and Heather Burrows, Medicine

Enhancing Direct Observation Skills for Pediatric Primary Care Faculty

#### 7. Janet Kinney, Anne Gwozdek, and Wendy Kerschbaum, *Dentistry*

Enhancing Health Behavior Change Curriculum through Faculty Development

#### 8. P. Gavin LaRose and Angela Kubena, *Mathematics*

Expanding the Math 105 Online Problem Library

## 9. David Porter, English Language and Literature, Qiuli Zhao, Laura Grande, and Jinyi Li, Asian Languages and Cultures

Instructional Technology and Literacy Skills in First- and Third-Year Chinese

#### 10. Robert Rayher, Screen Arts and Cultures

A Revised Curriculum for SAC's New Dramatic Narrative Production Stream

#### 11. Jan Stegemann, Biomedical Engineering

Integrating Case Studies into the Biomedical Engineering Design Experience

#### 12. Megan Sweeney, Afroamerican and African Studies

DAAS Community Engaged Pedagogy

# ► Investigating Student Learning Grant

Now in its fifth year, this program provides grants to faculty who wish to investigate aspects of student learning in their courses, curricula, or educational programs. ISL participants attend a one-day spring symposium at U-M on research about teaching and learning, conduct educational research on student learning, and share their insights with colleagues at a CRLT-sponsored forum. Grant awards of \$3,000 are available to individual faculty members, and awards of \$4,000 are available to faculty member-graduate student/postdoc teams. This year, funding was doubled for successful proposals that focused on learning experiences suggested by President Mary Sue Coleman's Third Century Initiative: (1) action-based immersive learning experiences or (2) student development of creative approaches to the world's greatest challenges.

## Investigating Student Learning Recipients, Winter 2012

1. Rolf T. Bouma, *Program in the Environment* and Melody Pugh (Graduate Student), *Program in English and Education* 

Transforming and Transformative Ethics

2. Jeremiah Chamberlain, *English Language and Literature*, Aaron McCollough, *U-M Library*, and Kelly Davenport (Graduate Student), *School of Information* 

"Beating the Bounds": An Inquiry into Information Literacy and Student Learning Ecologies in the Library and English Department Writing Program

3. Robin Fowler, Technical Communication Program

The Effect of Electronic Platform on Student Engineering Design Team Success

4. Laurie Hartman and Cynthia Fenske, Nursing

Using Video Patient Care Simulations to Enhance Role Identification and Clinical Judgment of Nursing Students and Nurse Practitioner Students

5. Leslie Hollingsworth, Social Work

Evaluating Student Learning Methods of Interpersonal Social Work Practice with African American Families, Offered in Historical and Contemporary Context

6. Helen Morgan and Karen McLean, Obstetrics and Gynecology

The Flipped Classroom in the Obstetrics and Gynecology Medical Student Clerkship: Implementation and Evaluation of an Online Curriculum

7. Leseliey Welch, Women's Studies

Leading Feminism: How Women's Studies Students Integrate and Apply Feminist Theory in Action-Learning Placements and Its Impact on Student Leadership Development and Aspirations

8. Steven M. Yalisove, Materials Science and Engineering

Improving Student Learning with an Inverted Classroom Model: An Action-Based Immersive Learning Experience Proposal

# Teaching with Technology Institute

This program supports faculty members who have identified specific strategies for using technology to enhance their teaching. The overall program helps faculty define the goals for the project, develop their technological skills, and integrate instructional technology into teaching a specific course or courses. The Institute consists of individual consultations during April, a three-day institute in May, and a reunion meeting during the following academic year to debrief faculty experiences. Each participant is awarded a grant of \$2,500.

# Teaching with Technology Institute Recipients, Winter 2012

1. Elizabeth Du, Ophthalmology

Basic Principles of Ophthalmic Surgery: Web-Based Learning

2. Christopher Friese, Nursing

Application of the Google Product Suite to an Undergraduate Nursing Elective

3. Wei Lu, Mechanical Engineering

A Virtual Lab for Nanotechnology Education

4. Michael Makin, Slavic Languages and Literatures

Virtual Collaboration for RUSLAN ASB and Research Projects

5. Rafat S. Rizk, *Internal Medicine* 

Developing a Differential Diagnosis with Patient Centered Questions Using a Web-Based Guide

Luis F. Sfeir-Younis, Sociology

Family Biographies to Build Community and Enhanced Learning

7. Stephanie Sheffield, Technical Communication Program

Improving Oral Presentation Design, Delivery, and Feedback in a Large Lecture Course through Interactive Online In-Class Activities

8. Sean Silver, English Language and Literature

Game Theory and Literature

9. Melanie Yergeau, English Language and Literature

Disability Culture and the Design of Online Spaces

# Lecturers' Professional Development Grants

Lecturers with continuing teaching appointments on the Ann Arbor campus are eligible for grants of up to \$2,000 to support professional development activities that involve teaching, research, and/or creative endeavors. Examples of grant funding include participation at national or international professional meetings, pedagogical programs and projects, graduate student or work-study student assistance, computer hardware or software, travel required to access resources at other institutions, subscriptions to professional journals, and editorial assistance.

#### Lecturers' Professional Development Grant Recipients, Winter 2012

1. Shubhangi Dabek, Germanic Languages and Literatures

Participation in Professional Development Seminar by Goethe Institute, Germany

Sabine Hildebrandt, Anatomical Sciences

Anatomy in the Third Reich: Victims and Perpetrators

# 3. Irene Hwang, Architecture

Unpracticed: New Professional Territories for Architectural Education

#### 4. James Macgillivray, Architecture

Film Grows Unseen: Screening of Temos Film Works

#### 5. Donka Markus, Classical Studies

Travel to the Classical Association of the Middle West and South Conference in Baton Rouge, LA to Deliver a Paper on Ancient Pedagogy for the Modern Classroom and Beyond

#### 6. Brenda Marshall, English Language and Literature

Dakota, or What's a Heaven For: Getting the Word out through Conferences and Readings

#### 7. Toby Millman, Art and Design

Home(land)

#### 8. Thomas Moran, Architecture

Micro-Factory: Rotational Molding a Recycled Plastic Chair

#### 9. María Dolores Morillo, Romance Languages and Literatures

Spanish 295: New Content and Website Project

#### 10. Tsz Yan Ng, Architecture

The Aesthetics of Universal Exposition – of Architecture and Ideologies

#### 11. Robert Rayher, Screen Arts and Cultures

iPad (apps) as Moving Image Production "Tool" Replacing Traditional Production Hardware

#### 12. Yoshimi Sakakibara, Asian Languages and Cultures

A Study of the Effectiveness of Self-Study Drill Materials for Basic Japanese Grammar

#### 13. Terri Sarris, Screen Arts and Cultures

2012 University Film and Video Association Conference and "Sitcom School" with "The Big Bang Theory"

## 14. Michael Shriberg, Program in the Environment

Building Sustainability Cultural Change Leaders: Bringing the U-M Model to the World Symposium on Sustainable Development at Universities

#### 15. Bradley Taylor, Museum Studies

Authenticity Reconsidered: Reconstructing a London Jewelers in the Shadow of the Rouge Plant

#### 16. Laura Thomas, Residential College

Love and Wonder in a Ruined World: Continuing Graduate Education and Short Story Collection Manuscript Preparation

#### 17. Paul Tierman, Architecture

Park-a-Bike: Detroit

#### 18. Craig Wilkins, Architecture

A Stronger Soul Within a Finer Frame: The Autobiography of the National African-American Museum of History & Culture

## 19. Maria Woodward, Ophthalmology

Visual Outcomes and Surgical Techniques for Descemet's Stripping Automated Endothelial Keratoplasty

#### 20. Sheung Yung and Joyce Yip, Music Theory

A Different Look at the Mazurkas of Chopin: The Roles of the Introduction, the Reprise, and the Coda

# Instructional Development Fund

Through its Instructional Development Fund (IDF), CRLT awards small grants of up to \$500 to faculty on the Ann Arbor campus. These grants support innovative activities to improve teaching and learning. The funds may be used for expenses such as supplies and equipment, programming or research assistance, and fees for conferences directly related to teaching. Applications are accepted on a rolling basis throughout the year.

## Instructional Development Fund Recipients, 2011-2012

#### 1. Wisam Al-Rawi, Dentistry

Teaching Oral Radiology

#### 2. Paulina Laura Alberto, History

Revision of History 101: What is History? Thinking through the Past

#### 3. Kwasi Ampene, Music, Theatre and Dance

Field Trip to Detroit to See the Fela Musical and for Class Visits by the Choreographer/Artistic Director and Selected Case Members

#### 4. Erika Benavides, *Dentistry*

Technology Innovations in the Small Group Radiographic Interpretation Seminars

#### 5. Amber Dallwig, Nursing

Attend ACHNE 2012 Annual Institute

#### 6. Roland Graf, Art and Design

Procure Materials for Use in ARTDES 310 Outreach Studio Entitled "Design and Build Portable Shelter: Ann Arbor's Camp Take Notice"

#### 7. Roger Grant, Music, Theatre and Dance

Francesca Brittan, Guest Lecturer for Music Theory 405/Comparative Literature 492: The Fantastic in Music and Literature

#### 8. Leslie Hollingsworth, Social Work

Hiring Actors to Participate in Role Play Simulations as Part of Interpersonal Social Work with Families Course

# 9. Allen Liu, Mechanical Engineering

Teaching ME 211: Using a Tablet Computer

#### 10. Christina Lupton and Sean Silver, English Language and Literature

Include Students in an 18th-Century Meal Prepared in Conjunction with May Workshop on 18th-Century Literature

## 11. Stefano Mengozzi, Music, Theatre and Dance

Honoraria for Two Guest Instructors to Coach Students in the Use of Renaissance Instruments from the Stearns Collection as Part of the Course "Renaissance Instrumental Music"

#### 12. Rebekah Modrak, Art and Design

Close Caption Video Tutorials Previously Created to Teach Elements of Photographic Art/Technique

#### 13. Margaret Noori and Howard Kimewon, American Culture

Archive Contemporary Conversations and Dramatic Narratives in Anishinaabemowin for use in the Second- and Third-Year Ojibwe Courses

#### 14. David Porter, English Language and Literature and Laura Grande, Asian Languages and Cultures

Development of an Instructional App on Chinese Characters for Use in First-Year Chinese Language Courses at U-M

#### 15. Ryan Szpiech, Romance Languages and Literatures

Manuscripts to Movies: Teaching Medieval Literature with Final Cut Pro

#### 16. Dawn Tilbury, Mechanical Engineering

Funds for Take-Home Control Experiment

#### 17. Stephen Ward, Afroamerican and African Studies

Yusef Shakur's visit to AAS 495: Black Radical Detroit and to Support AAS 495 Students' Visit to the James and Grace Lee Boggs Center to Nurture Community Leadership (BCNCL)

#### 18. Daniel Weissman, Psychology

Cognitive Neuroscience Poster for PSYCH 245

# Publications and Presentations

In October 2011, Stylus Publishing released Advancing the Culture of Teaching on Campus: How a Teaching Center Can Make a Difference. Written by CRLT's professional staff, the chapters in this volume (listed below) constitute a resource for the successful operation of a teaching center on a research university campus. The book is already selling well on U.S. university campuses.

The book found a particularly eager audience in China: The Zhejiang University Press purchased translation rights and produced a Chinese edition in May 2011. This edition was immediately put to use in CRLT's week-long seminar on faculty development for Chinese university leaders, and it serves as a textbook for nascent teaching center leaders who spend three weeks in Ann Arbor in the CRLT fellows program.



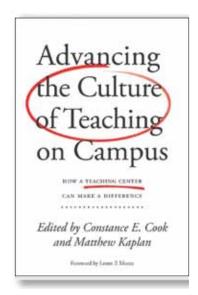
Foreword (Lester P. Monts)

Introduction: CRLT and Its Role at the University of Michigan (Constance E. Cook) PART ONE LEADERSHIP AND CORE FUNCTIONS

- 1. Leading a Teaching Center (Constance E. Cook)
- 2. Measuring a Teaching Center's Effectiveness (Mary C. Wright)
- Forging Relationships with Faculty and Academic Administrators (Constance E. Cook and Deborah S. Meizlish)
- Consultations on Teaching: Using Student Feedback for Instructional Improvement (Cynthia J. Finelli, Tershia Pinder-Grover, and Mary C. Wright)
- Graduate Peer Teaching Consultants: Expanding the Center's Reach (Tershia Pinder-Grover, Mary C. Wright, and Deborah S. Meizlish)
- 6. Approaches to Preparing Future Faculty for Teaching (Chad Hershock, Christopher R. Groscurth, and Stiliana Milkova)

#### PART TWO SPECIAL EMPHASES AT CRLT

- 7. The Role of a Teaching Center in Curricular Reform and Assessment (Constance E. Cook, Deborah S. Meizlish, and Mary C. Wright)
- Strengthening Diversity Through Faculty Development (Crisca Bierwert)



- 9. Engaging Faculty in Effective Use of Instructional Technology (Erping Zhu, Matthew Kaplan, and Charles Dershimer)
- Action Research for Instructional Improvement (Chad Hershock, Constance E. Cook, Mary C. Wright, and Christopher O'Neal)
- 11. Role-Play and Beyond: Strategies for Incorporating Theatre Into Faculty Development (Matthew Kaplan and Jeffrey Steiger)

Conclusion: Responding to Challenges Faced by Teaching Centers at Research Universities (Matthew Kaplan and external contributors)

CRLT published Occasional Paper No. 30, *Use of Laptops in the Classroom*, by Erping Zhu, Matthew Kaplan, R. Charles Dershimer, and Inger Bergom. It examines students' perceptions of the effects of laptops on attentiveness, engagement, and learning and suggests guidelines for the effective use of laptops and other mobile devices in the classroom.

CRLT again distributed three of its publications for GSI development: A Guidebook for University of Michigan Graduate Student Instructors: Strategies and Resources for New and Experienced GSIs, Guidebook for Teaching Labs for University of Michigan Graduate Student Instructors, and Departmental GSI Development: A Handbook for Faculty and GSMs Who Work with GSIs. The guidebooks, handbooks, and a series of Occasional Papers are available on CRLT's website. http://www.crlt.umich.edu/publinks/publinks.php

# Publications by CRLT Staff

- Bierwert, C. (2011). CRLT white paper on multidisciplinary learning and team teaching. Ann Arbor, MI: Center for Research on Learning and Teaching, University of Michigan.
- Cook, C. E., & Kaplan, M. (Eds.). (2011). *Advancing the culture of teaching on campus: How a teaching center can make a difference*. Sterling, VA: Stylus Publishing, LLC.
- Harding, T., Carpenter, D., & Finelli, C. (2012). An exploratory investigation of the ethical behavior of engineering undergraduates. *Journal of Engineering Education*, 101(2), 346–374.
- Holsapple, M., Carpenter, D., Sutkus, J., Finelli, C., & Harding, T. (2012). Framing faculty and student discrepancies in engineering ethics education delivery. *Journal of Engineering Education*, 101(2), 169–187.
- Kalish, A., Robinson, S., Border, L. L. B., Chandler, E. O., Connolly, M., Eaton, L. J., Gilmore, J., et al. (in press). Steps toward a framework for an intended curriculum for graduate and professional students: How we talk about what we do. *Studies in Graduate and Professional Student Development, 14*.
- Kaplan, M., LaVaque-Manty, D., Meizlish, D., & Silver, N. E. (Eds.). (forthcoming). *Reflection and metacognition in college teaching*. Sterling, VA: Stylus Publishing, LLC.
- Meizlish, D., Pinder-Grover, T., & Wright, M. C. (2012). Effective use of graduate peer teaching consultants at the University of Michigan: Recruitment, training, supervision, and evaluation. In K. Brinko (Ed.), Practically speaking: A sourcebook for instructional consultants in higher education (2nd ed.). Stillwater, OK: New Forums Press.
- Pinder-Grover, T., Milkova, S., & Hershock, C. (2012). Training TAs as consultants at the University of Michigan: Workshop series for peer mentors. In K. Brinko (Ed.), *Practically speaking: A sourcebook for instructional consultants in higher education* (2nd ed.). Stillwater, OK: New Forums Press.

- Schram, L. N., & Allendoerfer, M. G. (2012). Graduate student development through the Scholarship of Teaching and Learning. Journal of the Scholarship of Teaching and Learning, 12(1), 8–22.
- Schram, L. N., & Wright, M. C. (in press). Teaching mentorship programs for graduate student development. The Journal of Graduate and Professional Student Development.
- Wright, M. C., Bergom, I., & Brooks, M. (2011). The role of teaching assistants in student-centered learning: Benefits, costs, and negotiations. Innovative Higher Education, 36(5), 331–342.
- Wright, M. C., Niemer, R. K., Bruff, D., & Valle, K. (in press). Tweeting #PODHBCU: Content and process of the 2011 POD HBCUFDN Conference Twitter backchannel. To Improve the Academy.
- Wright, M. C., & Schram, L. N. (2011). Mentoring graduate student mentoring. The POD Network Teaching Excellence Essay Series, 22(7). Retrieved from http://www.podnetwork.org/publications/teachingexcellence/10-11/V22\_N7\_Wright\_Schram.pdf
- Zhu, E., & Kaplan, M. (in press). Technology and teaching [revised chapter]. In M. Svinicki & W. J. McKeachie (Eds.), McKeachie's teaching tips: Strategies, research, and theory for college and university teachers (14th ed.). Belmont, CA: Wadsworth, Cengage Publishing.
- Zhu, E., Kaplan, M., Dershimer, R. C., & Bergom, I. (2011). Use of laptops in the classroom: Research and best practices. Occasional Paper No. 30. Ann Arbor, MI: Center for Research on Learning and Teaching, University of Michigan.

# Presentations

- Al-Khafaji, A. B., Neubauer, M. J., Daly, S. R., & Finelli, C. J. (2012, February). Cultivating the classroom: Student perspectives of faculty classroom practices. Presented at the U-M CRLT-Engin Sixth Annual Research and Scholarship in Engineering Education Poster Session, Ann Arbor, MI.
- Bielby, R., Harding, T., Carpenter, D., Finelli, C., Sutkus, J., Burt, B., Ra, E., et al. (2011, June). Impact of different curricular approaches to ethics education on ethical reasoning ability. Presented at the American Society for Engineering Education Conference, Vancouver, Canada. Retrieved from http://deepblue.lib.umich.edu/ handle/2027.42/86116
- Burt, B., Carpenter, D., Finelli, C., Harding, T., Sutkus, J., Holsapple, M., Bielby, R., et al. (2011, June). Outcomes of engaging engineering undergraduates in co-curricular experiences. Presented at the American Society of Engineering Education (ASEE) Conference and Exposition, Vancouver, Canada. Retrieved from http:// deepblue.lib.umich.edu/handle/2027.42/86117
- Burt, B. A., Carpenter, D. D., Holsapple, M., Finelli, C. J., Bielby, R., Sutkus, J. A., & Harding, T. (2012, February). Co-curricular experiences: Bridging the disconnect between the classroom and ethics instruction. Presented at the U-M CRLT-Engin Sixth Annual Research and Scholarship in Engineering Education Poster Session, Ann Arbor, MI.
- Carpenter, D. D., Finelli, C. J., Holsapple, M., Bielby, R., Burt, B., & Sutkus, J. (2011, October). Assessing the ethical development of engineering undergraduates in the United States. Presented at the 2011 International Research in Engineering Education Symposium, Madrid, Spain.
- Carpenter, D. D., Sutkus, J. A., Finelli, C. J., & Harding, T. (2011, October). An exploration of the ethical development of engineering undergraduates. Presented at the 41st IEEE/ASEE Frontiers in Education, Rapid City, SD.

- Cook, C. E., & Kaplan, M. (2011, October). Leading a teaching center: Sharing management lessons. Presented
  at the Annual meeting of the Professional and Organizational Development (POD) Network in Higher
  Education, Atlanta, GA.
- Cook, C. E., Schram, L. N., & Zhu, E. (2011, October). International educational development engagement: Perspectives from US-China collaborations. Presented at the Professional and Organizational Development (POD) Network Conference, Atlanta, GA.
- Daly, S. R., Finelli, C. J., Al-Khafaji, A. B., & Neubauer, M. J. (2012). *Student enrollment and success in the College of Engineering*. Internal report for the College of Engineering. Ann Arbor, MI: University of Michigan.
- Finelli, C. J. (2012a, March 15). *Ethical development in engineering undergraduates: Research findings*. Presented at the U-M CRLT-Engin Seminar Series, Ann Arbor, MI.
- Finelli, C. J. (2012b, May). Consultations on teaching benefits for engineering faculty. Presented at the CRLT Gallery of U-M Teaching Innovations, Ann Arbor, MI.
- Finelli, C. J. (2012c, December 15). *Motivating change in faculty teaching practices to support a diverse student body in engineering*. Presented at the U-M CRLT Program Manager Retreat, Ann Arbor, MI.
- Finelli, C. J. (2011a, October 26). *Teaching practices of engineering faculty*. Presented at the U-M CRLT-Engin Seminar Series, Ann Arbor, MI.
- Finelli, C. J. (2011b, November 16). *Research on cheating and ethical development*. Presented at the U-M CRLT Seminar Series, Ann Arbor, MI.
- Finelli, C. J., Carpenter, D. D., & Harding, T. (2012, March). *Collaborative research: A holistic assessment of the ethical development of engineering undergraduates.* Presented at the NSF Engineering Education Awardees Conference, Arlington, VA.
- Finelli, C. J., & Daly, S. R. (2012, May 11). *Faculty motivation to adopt effective teaching practices*. Presented at the Presentation for U-M CoE Engineering Education Research Community, Ann Arbor, MI.
- Finelli, C. J., & Daly, S. R. (2011, October). *Teaching practices of engineering faculty: Self-reported behavior and actual practice.* Presented at the 2011 International Research in Engineering Education Symposium, Madrid, Spain.
- Finelli, C. J., & Harding, T. (2011, October 24). SEED Project Regional Workshop. Ann Arbor, MI.
- Green, K., Pinder-Grover, T., & Mirecki Millunchick, J. (2012, February). Impact of screencast technology: Connecting perceptions and performance. Presented at the U-M CRLT-Engin Sixth Annual Research and Scholarship in Engineering Education Poster Session, Ann Arbor, MI.
- Hershock, C. (2011, October). *Postdoc teaching preparation: Filling a PFF gap using blended learning*. Presented at the Professional and Organizational Development (POD) Network Conference, Atlanta, GA.
- Holsapple, M., Finelli, C. J., Bielby, R., Burt, B., Carpenter, D. D., & Harding, T. (2012, February). Student engagement in ethics education: Quantity and quality. Presented at the U-M CRLT-Engin Sixth Annual Research and Scholarship in Engineering Education Poster Session, Ann Arbor, MI.
- Holsapple, M., Sutkus, J., Carpenter, D., Finelli, C., Burt, B., Ra, E., Harding, T., et al. (2011, June). We can't get no satisfaction! *The relationship between students' ethical reasoning and their satisfaction with engineering ethics education*. Presented at the American Society for Engineering Education Conference, Vancouver, Canada. Retrieved from http://deepblue.lib.umich.edu/handle/2027.42/86096
- Holsapple, M., Sutkus, J. A., Finelli, C. J., Carpenter, D. D., Burt, B. A., Ra, E., Harding, T., et al. (2011, November). Exploring the relationship between satisfaction, pedagogical approaches, and student outcomes. Presented at the 26th Annual Conference of the Association for the Study of Higher Education, Charlotte, NC.

- Meizlish, D., & Hershock, C. (2011, October). Expanding access to PFF: Targeting hidden future faculty. Presented at the Professional and Organizational Development (POD) Network Conference, Atlanta, GA.
- Wright, M. C. (2011, October). Developing intercultural competence: The impact of a new international experience requirement on Art and Design students. Presented at the International Society for the Scholarship of Teaching and Learning, Milwaukee, WI.
- Wright, M. C., & Schram, L. N. (2011, October). Developmental stages of new instructional consultants: Implications for professional training. Presented at the Professional and Organizational Development (POD) Network Conference, Atlanta, GA.

# Review and Editorial Work

- ASEE 2012 Conference, ERM Division (C. Finelli, T. Pinder)
- International Society for the Scholarship of Teaching and Learning (ISSOTL) (M. Kaplan, M. Wright)
- The Journal of Faculty Development (M. Kaplan, D. Meizlish)
- The Journal of Higher Education (D. Meizlish)
- Learning, Media and Technology (E. Zhu)
- Professional and Organizational Development (POD) Network in Higher Education Conference (D. Meizlish, M. Wright)
- Research in Engineering Education Symposium (C. Finelli)
- Studies in Graduate and Professional Student Development (M. Wright)
- Teaching Sociology (M. Wright)
- To Improve the Academy (M. Wright)

# CRLT Regular Staff in 2011-2012

Executive Director	Constance E. Cook (also Associate Vice Provost)
Managing Director	Matthew Kaplan
Associate Director	Crisca Bierwert (also Coordinator of Multicultural Teaching and Learning)
Director of CRLT in Engineering	Cynthia Finelli (also Research Associate Professor)
Director of Assessment	Mary Wright (also Associate Research Scientist)
Assistant Directors and Instructional Consultants	Meg Bakewell, Instructional Consultant
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	Deborah Meizlish, Assistant Director
	Rachel Niemer, Assistant Director
	Tershia Pinder-Grover, Assistant Director
	Laura Schram, Instructional Consultant
	Erping Zhu, Assistant Director
CRLT Faculty Associates	Mika LaVaque-Manty Arthur F. Thurnau Professor of Political Science and Philosophy
	Joanna Mirecki Millunchick Professor of Materials Science and Engineering
CRLT Theatre Program	Jeffrey Steiger, Artistic Director (succeeded by Sara Armstrong)
	Courtney Riddle, Managing Director
	Jessica Von Hertsenberg, Administrative Coordinator
Administrative Staff	Lori Dickie, Budget Administrator
	Ryan Hudson, Administrative and Publications Specialist
	Carolyn Parker, Assistant to the Executive Director
Project Staff	Pam Fisher, Program Assistant
	Amy Hamermesh, Computer Systems Specialist
	Jeri Hollister, Program Assistant
	Jessica Rapai, Program Assistant
	Melinda Thompson, Administrative Assistant
Staff in CRLT in Engineering	Shanna Daly, Instructional Consultant and Assistant Research Scientist
	Kenyon Richardson, Research Assistant and Program Assistant
	Laurie Stoianowski, Program Assistant
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List does not include graduate teaching consultants, graduate research assistants, actors, or work-study students.

# **CRLT Staff Biosketches**

## Administrative Team

Constance E. Cook, Associate Vice Provost and Executive Director, Ph.D. (Political Science): Constance Cook has served as Executive Director of CRLT since 1993. She was named Associate Vice Provost for Academic Affairs in 2006 and also serves as Clinical Professor of Higher Education in the Center for the Study of Higher and Postsecondary Education, as well as Adjunct Associate Professor of Political Science. Connie leads new initiatives on teaching and learning and represents both CRLT and the broader University community on those topics. She also runs professional development programs for international higher education leaders. With Managing Director Matt Kaplan, Connie edited Advancing a Culture of Teaching on Campus: How a Teaching Center Can Make a Difference (Stylus Publishing, 2011), a book describing CRLT programs and strategies authored by them and their CRLT colleagues. Prior to becoming the Director of CRLT, Connie was the executive assistant to the president of the University of Michigan and, from 1987-1990, she was coordinator of the FIPSE (Fund for the Improvement of Postsecondary Education) Comprehensive Program at the U.S. Department of Education. Before going to Washington, D.C., Connie was an associate professor at Albion College, where she chaired the political science department. She received her B.A. from Barnard College, her M.A. from The Pennsylvania State University, and her Ph.D. from Boston University, all in political science. Her two political science books concern American political interest groups: Lobbying for Higher Education: How Colleges and Universities Influence Federal Policy (Vanderbilt University Press, 1998) and Nuclear Power and Legal Advocacy: The Environmentalists and the Courts (D.C. Heath/Lexington Books, 1980).

Matthew Kaplan, Managing Director, Ph.D. (Comparative Literature): Matt runs the day-to-day operations of the center, including oversight of budget, publications and publicity, and CRLT's seminar series. He collaborates with the artistic director of the CRLT Players on theatre projects and with CRLT's professional staff on meeting the needs of the university's instructional community. He also co-directs the LSA Teaching Academy and oversees the Thurnau competition, the university's highest undergraduate teaching award. Matt received his Ph.D. in comparative literature from the University of North Carolina at Chapel Hill, where he worked at UNC's Center for Teaching and Learning for three years before joining CRLT in 1994. He has published articles on the academic hiring process, the use of interactive theatre as a faculty development tool, and the evaluation of teaching, and he co-authored a chapter of McKeachie's Teaching Tips on technology and teaching. He has co-edited The Scholarship of Multicultural Teaching and Learning (Jossey-Bass, 2007), a volume of New Directions for Teaching and Learning, and edited two volumes of To Improve the Academy (New Forums Press, 1998, 1999). With Executive Director Connie Cook, Matt edited Advancing a Culture of Teaching on Campus: How a Teaching Center Can Make a Difference (Stylus Publishing, 2011), a book describing CRLT programs and strategies authored by them and their CRLT colleagues. He was a member of the Professional and Organizational Development (POD) Network in Higher Education's Core Committee from 1998 to 2001.

Crisca Bierwert, Associate Director and Coordinator of Multicultural Teaching and Learning, Ph.D. (Anthropology): Crisca provides workshops and consultations for departments and programs, consults with individual faculty members and GSIs, and leads programs to promote diversity and social justice efforts at the university. She also does research on student learning outcomes, supports interdisciplinary teaching, and provides multicultural training. She participates in university-wide diversity initiatives and committees including the University Diversity Council, Arts of Citizenship,

and ArtsEngine. Before coming to CRLT, she obtained her Ph.D. degree in cultural anthropology from the University of Washington (Seattle), worked in the Native educational programs of the Coqualeetza Centre (Sardis, B.C.), and taught at the University of Michigan. Her major publications in anthropology and Native American Studies focus on text analysis, cultural politics, and environmental issues. They include *Lushootseed Texts: An Introduction to Puget Salish Narrative Aesthetics and Brushed by Cedar, Living by the River: Coast Salish Figures of Power. Program Managers.* 

# **Program Managers**

Sara Armstrong, artistic director of the CRLT Theatre Program: Sara has over twenty years of experience as an actor, director, dramaturg, arts administrator, and educator across professional, university, and community contexts. Artistically, she is committed to creating work that encourages dialogue and critical reflection. As artistic director of the CRLT Theatre Program, she maintains the company's repertoire of existing productions, develops original scripts, and works with academic units to incorporate theatre into their professional development programming. She also consults with faculty and graduate student instructors (GSIs) on communication issues and on incorporating performance into their instructional practices. Sara is a performance scholar. Her research focuses on the impact performers' physical histories have on their conceptual and somatic experiences of performance training.

Meg Bakewell, Instructional Consultant, *Ph.D.* (*Biology*): Meg earned a B.S. in biological sciences from Wayne State University, and went on to earn her M.S in molecular, cellular, and developmental biology and her Ph.D. in ecology and evolutionary biology, both at the University of Michigan. As a graduate student, Meg worked for CRLT as a graduate teaching consultant, with a special interest in helping faculty and GSIs make effective use of instructional technology. As an instructional consultant, Meg continues to consult with faculty and graduate students about instructional technology. She also facilitates workshops related to teaching and learning, conducts midterm student feedback sessions, coordinates the U-M Graduate Teacher Certificate Program and the Rackham-CRLT Intercampus Mentorship Program, and she co-teaches with the English Language Institute a course for prospective GSIs who were educated abroad.

**Shanna Daly**, **Instructional Consultant and Assistant Research Scientist**, *Ph.D. (Engineering Education)*: Shanna earned a B.E. in chemical engineering from the University of Dayton in 2003 and an M.S. in chemistry and a Ph.D. in engineering education from Purdue University, in 2006 and 2008, respectively. She received the Apprentice Faculty Grant Award from the Educational Research Methods Division of ASEE. Her research focuses on the investigation of design ideation, innovation practices, and creative processes as well as the translation of research to practice in the form of pedagogy, curriculum development, and faculty support.

Cynthia Finelli, Director of CRLT in Engineering and Research Associate Professor, *Ph.D.* (*Electrical Engineering Systems*): Cindy earned B.S.E.E., M.S.E.E., and Ph.D. degrees from the U-M in 1988, 1989, and 1993, respectively. She holds a joint appointment in the College of Engineering and CRLT. Prior to joining CRLT in April 2003, Cindy was the Richard L. Terrell Professor of Excellence in Teaching, founding director of the Center for Excellence in Teaching and Learning, and associate professor of electrical engineering at Kettering University. Her current research interests include evaluating methods to improve teaching, studying faculty motivation to change classroom practices, and exploring ethical decision-making in engineering students. Dr. Finelli is past chair of the Educational Research and Methods Division of the American Society of Engineering Education.

**Chad Hershock**, Assistant Director and Coordinator of Science Initiatives, *Ph.D. (Biology):* Chad coordinates CRLT's initiatives regarding the sciences, health sciences, and instructional technology, consults with units, faculty and GSIs on teaching and course design, participates in research and evaluation projects, and facilitates

customized workshops on teaching methods. He created the U-M Graduate Teacher Certificate Program and U-M Postdoctoral Short-Course on College Teaching in Science and Engineering. Chad's training includes a B.S. in biology from the University Scholars Program at the Pennsylvania State University and a Ph.D. in biology from the University of Michigan, where he also completed a postdoctoral fellowship in ecology and evolutionary biology. Prior to joining CRLT in 2005, he worked as a research scientist and project manager at BioMedware, Inc., and as a lecturer at the University of Michigan's Ann Arbor, Dearborn, and Biological Station campuses. He has been teaching at U-M since 1994.

Deborah Meizlish, Assistant Director, Ph.D. (Political Science): Deborah joined CRLT in 2001. At CRLT, Deborah consults with administrators, faculty, and GSIs on course and curricular issues, including assessment; plans university-wide programs on teaching, learning, and academic leadership; and conducts seminars on a wide variety of pedagogical topics. Deborah coordinates CRLT's grants programs, co-directs the LSA Teaching Academy and is co-principal investigator on "The Impact of Mega-Cognitive Strategies within Writing in the Disciplines: Experiments to Improve Writing and Critical Thinking," funded by the Teagle and Spencer Foundations. Deborah's research and writing focus on the scholarship of teaching and learning, academic hiring, preparing future faculty developers, and academic integrity. She has a Ph.D. in political science from the University of Michigan.

Rachel Niemer, Assistant Director, Ph.D. (Chemistry): Rachel earned a B.A. in chemistry and women's studies at Bowdoin College and her Ph.D. in chemistry from Caltech. Prior to coming to CRLT, Rachel taught chemistry at Gustavus Adolphus College and courses on pedagogy to undergraduate peer leaders as part of the Workshop program at the University of Rochester. As an assistant director at CRLT, Rachel consults with faculty and graduate students on pedagogy and technology, co-directs the Health Sciences Teaching Academy, coordinates the local Center for the Integration of Research, Teaching, and Learning (CIRTL) programs, and oversees GSI teaching orientation. Rachel's current research interests focus on the use of social media in teaching and learning, and clinical teaching in the health sciences.

Tershia Pinder-Grover, Assistant Director and Coordinator of GSI Initiatives, Ph.D. (Mechanical Engineering): After receiving a B.S. in fire protection engineering from the University of Maryland, Tershia went on to earn her M.S. and Ph.D. in mechanical engineering from the University of Michigan. In August 2005, she joined CRLT, where she is responsible for planning teacher training for new engineering GSIs, co-directing the Rackham-CRLT Preparing Future Faculty Seminar, and developing pedagogical workshops. Tershia also consults with faculty and GSIs on a variety of teaching and learning issues and participates in engineering education research initiatives.

Laura Schram, Instructional Consultant, Ph.D. (Political Science): Laura earned a B.A. in international politics and economics from Middlebury College and Ph.D. in political science from the University of Michigan. Laura coordinates several graduate student development programs, including the Graduate Teaching Consultant (GTC) group, the PFF Conference, the PFF Seminar, and the "What's It Like" panel series. Laura also consults with faculty and GSIs on their teaching and supports them in achieving their student learning goals. She facilitates several workshops related to teaching and learning and conducts midterm student feedback sessions for faculty. Her research interests include the scholarship of teaching and learning, graduate student professional development, mentorship, and learner-centered teaching.

Jeffrey Steiger, artistic director of the CRLT Theatre Program and CRLT Artist-in-Residence: Jeffrey has been working in theatre and with interactive theatre techniques for over twenty years. His career as an actor and director centers on the idea of theatre as a compelling agent for social change. As artistic director of the CRLT Theatre Program he created original scripts, facilitated interactive performances and workshops, collaborated with academic units to apply theatre to their faculty development needs, and consulted with faculty and graduate student instructors on voice and communication issues. Under his direction, the CRLT Theatre Program became a national resource, performing at campuses and conferences around the country. In addition to his work with the CRLT Players, Jeffrey writes, directs, and produces original work for the stage. He also has experience in the classroom, having taught courses on performance art, comedy, and acting for non-actors both at U-M and at Ann Arbor Community High School.

Mary Wright, Director of Assessment and Associate Research Scientist, *Ph.D. (Sociology)*: Mary works with U-M's faculty and academic units on assessment of student learning, evaluation of educational initiatives, and the scholarship of teaching and learning (SoTL). She also is involved with CRLT's PFF initiatives. Her research and teaching interests include teaching cultures, graduate student professional development, undergraduate retention in the sciences, and qualitative research and evaluation methods. Her book, *Always at Odds?: Creating Alignment Between Faculty and Administrative Values*, was published in 2008 by SUNY Press. Outside CRLT, Mary has served as an external evaluator for several NSF grants, most frequently ADVANCE grants. She is also a member of the Professional and Organizational Development (POD) Network in Higher Education's Board of Directors (Core Committee), and she co-chairs the Graduate and Professional Student Development Committee. Mary earned an A.B. in sociology from Princeton University, an M.A. and Ph.D. in sociology from the University of Michigan, and an M.A. in higher education administration from the Center for the Study of Higher and Postsecondary Education at U-M.

**Erping Zhu**, Assistant Director and Coordinator of Instructional Technology, *Ph.D.* (*Instructional Systems Technology*): Erping earned a Ph.D. in instructional systems technology from Indiana University. Erping consults with faculty about integrating technology into their teaching and developing courses that incorporate instructional technology. She collaborates with colleagues from U-M technology units to provide services and programs to faculty through the Enriching Scholarship conference. She also coordinates the Provost's Teaching Innovation Prize and co-directs the Teaching with Technology Institute. She has authored and co-authored chapters in books, encyclopedias, and academic journals. Her research focuses on technology and teaching, the scholarship of teaching, and online learning and instruction. Erping also coordinates CRLT's China initiatives such as the Michigan-China University Leadership Forum, the Michigan Faculty Development Seminar, and the CRLT Fellows Program for teaching center directors from elite Chinese universities.

#### Administrative Staff

Allyson Bregman, Postdoctoral Research Associate (term appointed): As a postdoctoral research associate, Allyson consulted with graduate student instructors and faculty on their teaching practice, facilitated workshops, and assisted in CRLT's assessment efforts. Prior to joining CRLT, Allyson worked as a project associate at the New Community College Initiative at the City University of New York, developing curricular and co-curricular programs for the New College and conducting professional development for faculty members. Allyson earned her B.A. in psychology from Connecticut College and her Ph.D. in educational psychology from the University of Michigan.

Lori Dickie, Budget Administrator: Lori earned a B.B.A. in accounting from Eastern Michigan University. She has 33 years of experience in finance and administration at U-M, first at the U-M Development Office and then at CRLT. With CRLT since 2000, she is responsible for budget management and implementation of HR processes.

Justin Heinze, Postdoctoral Research Associate (term appointed): Justin earned his Ph.D. in educational psychology from the University of Illinois-Chicago in 2011 and a B.A. and M.A. from the University of Michigan. His research interests include developmental transitions, social exclusion/ostracism, issues of gender and sexuality and longitudinal data methodology. At CRLT he works with GSIs and faculty to improve teaching in higher education and conducts research on how social judgments and particular social contexts affect individual attitudes and behavior. Prior to returning to U-M, he spent two years as a visiting fellow at Northwestern's Kellogg School of Management where he expanded his research to include social judgments and exclusion after moral violations.

Ryan Hudson, Administrative and Publications Specialist: Ryan earned bachelor's and master's degrees in political science from Carleton College and the University of Michigan, respectively. Since 2006, Ryan has managed CRLT's event planning team, overseeing program logistics. She is also part of the CRLT publications team, helping research, edit, and produce CRLT's Occasional Papers, Annual Report, and other materials.

Courtney Riddle, Managing Director, CRLT Theatre Program: Courtney studied communications and theater arts at Eastern Michigan University. As Managing Director of the CRLT Players she supervises and coordinates the work of actors and support staff, coordinates rehearsal and performance schedules, manages logistics of travel with the company, and collaborates with the artistic director on program development. Courtney has been a resident of Ann Arbor since 1998 and performs at The Performance Network, The Purple Rose Theater, The Tipping Point, and The Blackbird Theater.

Carolyn Parker, Assistant to the Executive Director: Carolyn earned a B.S. in kinesiology/education from the University of Michigan. She provides administrative and secretarial support to the executive director and to the managing director. She also plans and coordinates several campus-wide events including New Faculty Orientation and the Provost's Seminars on Teaching. She also provides support for the Michigan-China University Leadership Forum.

# Project Staff

Pam Fisher, Program Assistant: At CRLT, Pam supports campus-wide events, including the CRLT Seminar Series, Teaching with Technology Institute, and the One-Day PFF Conference. Pam also assists with CRLT website maintenance and desktop publishing.

Amy Hamermesh, Computer Systems Specialist: Amy is primarily responsible for technology support at CRLT. Before joining CRLT, Amy received her M.A. in linguistics from the University of Michigan and worked as the departmental administrator at the University of Michigan's Frankel Center for Judaic Studies. Amy provides support for all of CRLT's computer-related technology, including research and training for CRLT staff.

Jeri Hollister, Program Assistant: Jeri earned her B.A. in history of art and her M.F.A. from the School of Art and Design at the University of Michigan. Prior to joining CRLT in August 2004, she worked in the Visual Resources Collections in the History of Art Department in LSA. Jeri provides support for various CRLT programs, including the five-week Rackham-CRLT PFF Seminar, the seven-week Postdoctoral Short-Course on College Teaching in Science and Engineering, the Graduate Teacher Certificate Program, and CRLT grants. She also maintains the CRLT website and provides desktop publishing and graphic art support.

Jessica Rapai, Program Assistant: Jessica earned a B.A. in international relations from the University of Michigan. Before joining CRLT in 2011, Jessica worked for a fast-growing technology company in Ann Arbor. She brings extensive experience in planning and managing events to her support of a range of CRLT programs, including GSI teaching orientations, the Provost's Campus Leadership Program, CRLT's 50th Anniversary celebration, the annual International Faculty Dinner, staff retreats, and the Graduate Student Mentor/Graduate Teaching Consultant workshops. Jessica also oversees travel arrangements for CRLT.

**Kenyon Richardson**, **Program and Research Assistant**: Kenyon earned her B.A. in anthropology from U-M, and she previously worked for U-M's Undergraduate Research Opportunity Program (UROP) and the Program in the Environment. Kenyon provides research support for the CRLT-Engin's National Science Foundation project on motivating change in faculty teaching practice. She also supports the engineering teaching consultants and other CRLT in Engineering programs, and she maintains the CRLT in Engineering website.

Laurie Stoianowski, Program Assistant: Laurie studied business at Washtenaw Community College and has been at U-M since 1988. Prior to joining CRLT in Engineering, she was Assistant to the Director of the Automotive Research Center in Mechanical Engineering. She also has worked at the School of Education and the Residential College at U-M. In her current role, Laurie supports CRLT in Engineering programs, including the seminar series and teaching orientations for new engineering GSIs and undergraduate instructional aides, and she supports the director.

Melinda Thompson, Administrative Assistant: Melinda earned her associate's degree in administrative assistant technology from Washtenaw Community College. She has over 10 years of combined clerical and customer service experience and has worked in several different departments at the University of Michigan, including the Housing Information Office and the Facilities Information Center. Since January 2004, Melinda has been with CRLT, where she oversees the undergraduate student assistants and keeps the office well supplied and running smoothly.

Jessica Von Hertsenberg, Administrative Coordinator, CRLT Theatre Program and Program Assistant: Jessica earned her B.A. in German and linguistics from New York University in 2009. After moving to Ann Arbor, she joined CRLT in 2010. Jessica oversees performance and trip logistics for the CRLT Players and works with the managing director on scheduling and communication with theatre program contacts. She also provides support for other CRLT events.