2014 Faculty Scholarship Report

Design and Layout
Nick Paulus
Kelly Gatesman

Photography
Elizabeth Torgerson-Lamark/RIT

Published by
The Wallace Center - RIT Open Access Publishing

Office of the Provost
http://www.rit.edu/provost/
We are proud that at RIT we embrace the teacher scholar model and have faculty engaged in the continual learning process. Once again, the faculty at RIT have created a substantial body of work during the past academic year. As a result of their committed efforts, both the quality and quantity of the research, scholarship, and creative work produced at RIT has steadily increased compared to previous years.

Our new strategic plan, “Greatness Through Difference” underscores our vision to make RIT a pre-eminent student-centered research university. This includes faculty engaged in creative inquiry, the applications of new and existing technologies to solve industrial challenges, as well as interdisciplinary work that crosses and intersects traditional boundaries. The research, pedagogical undertakings and scholarly activities our faculty members embark on continues to impact the students we teach, our peers within the academic community, and the world.

The connections made by RIT faculty through research, scholarship and creative work establish new opportunities for our students, and prepare them for the next stage of their careers. It is through these diverse scholarly pursuits that students and faculty are able to collaborate across international borders, and bring new insights and perspectives to their work.

It is with great pride that I present this report highlighting our faculty’s scholarly achievements during 2014.

Jeremy Haefner, Ph.D.
Provost and Senior Vice President for Academic Affairs
Rochester Institute of Technology
Computer Science

Matthew Fluet, Assistant Professor


External Scholarly Fellowships:
8/1/2014-
7/31/2017
National Science Foundation (CISE Research Infrastructure (CRI))
Amount: $224,329
≠

External Scholarly Fellowships:
6/1/2014-
5/31/2018
National Science Foundation (Software and Hardware Foundations (SHF))
Amount: $236,744
≠

Joe Geigel, Professor


Edith Hemaspaandra, Professor


Christopher M Homan, Associate Professor


Trudy M Howles, Professor


Peizhao Hu, Assistant Professor

MATTHEW FLUET IS AN ASSISTANT PROFESSOR IN THE DEPARTMENT OF COMPUTER SCIENCE IN THE B. THOMAS GOLISANO COLLEGE OF COMPUTING AND INFORMATION SCIENCES. HIS RESEARCH INTERESTS LIE WITH THE DESIGN AND IMPLEMENTATION OF FUNCTIONAL PROGRAMMING LANGUAGES.

Programming languages are the medium through which computations are communicated, not only from a programmer to a computer, but also from one programmer to another. Dr. Fluet’s research aims to design and implement programming languages that make it easy to write programs that are both executed efficiently and guaranteed to be safe. Recently, his major scholarship activities have been centered around the Manticore and MLton projects.

The Manticore project (http://manticore.cs.uchicago.edu), in collaboration with Prof. John Reppy (University of Chicago) and students at RIT and UChicago, is a research effort to design and implement a parallel functional programming language that targets commodity multicore and shared-memory multiprocessors. The project has been supported by multiple NSF awards and yielded numerous publications. Dr. Fluet gave an invited talk on Manticore at the Second ACM SIGPLAN Workshop on Functional High-Performance Computing (FHPC’13). Dr. Fluet’s current research is focused on developing declarative language mechanisms for the controlled use of shared state and nondeterminism in parallel programs in order to increase their parallel efficiency.

The MLton project (http://www.mlton.org), led by Dr. Fluet, is an open-source whole-program optimizing compiler for the Standard ML (SML) functional programming language. MLton is widely regarded as one of the best compilers for any functional programming language and is actively used in both industry and academia. The project is being supported by two recent NSF awards. The first, in collaboration with Profs. Umut Acar and Guy Blelloch (Carnegie Mellon University), will addresses the problem of automatically managing spatial and temporal locality of a high-level garbage-collected parallel functional programming language. The second, in collaboration with Prof. Lukasz Ziarek (SUNY Buffalo), will enhance MLton through the development of type-checking and optimization infrastructures, threading and garbage collection frameworks, configuration and benchmarking support systems, and documentation and course material.

MATTHEW FLUET
ASSISTANT PROFESSOR
COMPUTER SCIENCE
B. THOMAS GOLISANO COLLEGE OF COMPUTING AND INFORMATION SCIENCES


Mohan J Kumar, Professor


Xumin Liu, Assistant Professor


Stanislaw Radziszowski, Professor


External Scholarly Fellowships:
- 5/1/2014-5/14/2014
  - Royal Swedish Academy of Sciences
  - Amount: 3000


Rajendra Raj, Professor


Leonid Reznik, Professor


Richard Zanibbi, Associate Professor


External Scholarly Fellowships:
6/15/2014- 7/5/2014
University of Nantes, France (Travel Expenses for Visiting Research Professor Appointment)
Amount: 0

External Scholarly Fellowships:
10/1/2014- 10/30/2014
University of Waterloo Canada (Travel Expenses for Visiting Research Professor Appointment)
Amount: 0


Published Game, Application or Software:
Stalnaker, David and Nidhin Pattaniyil. Tangent Math Search Engine (versions 0.1 and 0.2). Software. (DPRL Lab: Open Source). 2014.

Published Game, Application or Software:

Published Game, Application or Software:

Published Game, Application or Software:

Published Game, Application or Software:

Published Game, Application or Software:

Published Conference Proceedings:

Published Conference Proceedings:

Published Conference Proceedings:

Published Conference Proceedings:

Published Conference Proceedings:

Published Conference Proceedings:

Published Conference Proceedings:

Yin Pan, Associate Professor

Bill Stackpole, Associate Professor


Kaiqi Xiong, Assistant Professor


Information Sciences and Technologies

Charles Border, Associate Professor


Vicki L Hanson, Professor


**Invited Presentations/Keynotes:** Hanson, Vicki L. "Lifelogging and Care Home Residents." Augmenting Human Memory: Capture and Recall in the Era of Lifelogging. Leibniz Center for Informatics seminar on Augmenting Human Memory. Dagstuhl, Germany. 2 Sep. 2014. Address. Δ


**Bruce Hartpence, Associate Professor**


Edward Holden, Associate Professor


Matt Huenerfauth, Associate Professor

Published Conference Proceedings: Kacorri, Hernisa and Matt Huenerfauth. "Implementa-

Jai W Kang, Associate Professor


B. Thomas Golisano College of Computing and Information Sciences 15
Jim Leone, Professor


Sharon Mason, Associate Professor


Tae Oh, Associate Professor


Nirmala Shenoy, Professor


Brian Tomaszewski, Assistant Professor


Ronald P Vullo, Associate Professor


Elissa Weeden, Associate Professor

Michael Yacci, Professor


Qi Yu, Associate Professor


Steve Zilora, Associate Professor

PhD Program

Anne Haake, Professor


Pengcheng Shi, Professor


External Scholarly Fellowships:
6/1/2014-
5/31/2019
National Science Foundation
Amount: 446143
*

External Scholarly Fellowships:
11/12/2014-
10/31/2016
National Institutes of Health
Amount: 418602
*


School of Interactive Games and Media

Adrienne Decker, Assistant Professor


Gordon I Goodman, Professor


W Michelle Harris, Associate Professor


David W Simkins, Assistant Professor  


Stephanie Ludi, Professor  


Software Engineering 

Daniel Krutz, Lecturer  


**Samuel A Malachowsky, Lecturer**


**Andy Meneely, Assistant Professor**


**Mehdi Mirakhorli, Assistant Professor**


Meiyappan Nagappan, Assistant Professor


**Tom Reichlmayr, Associate Professor**


**James Vallino, Professor**


Amanda Bao, Assistant Professor


Md Abdullah al Faruque, Assistant Professor


Lisa L Greenwood, Lecturer

Frank Hanna, Associate Professor


Jeffrey W Rogers, Associate Professor


Joseph Rosenbeck, Professor


Scott B Wolcott, Professor
**JENNIFER SCHNEIDER** is McCARTHY CHAIR AND PROFESSOR IN THE DEPARTMENT OF CIVIL ENGINEERING TECHNOLOGY, ENVIRONMENTAL MANAGEMENT & SAFETY AT RIT. SHE FOUNDED AND LEADS THE COLLABORATORY FOR RESILIENCY & RECOVERY AT RIT: HTTP://WWW.RIT.EDU/CAST/CRR/. SHE WAS HONORED AS THE RIT BOARD OF TRUSTEES SCHOLAR AWARD IN 2014. PRIOR TO COMING TO RIT, DR. SCHNEIDER WORKED WITHIN CORPORATE EHS FOR KODAK, MOBIL AND ITT/GOULD, WHERE SHE HONED HER TECHNICAL MANAGEMENT AND CRISIS RESPONSE SKILLS. SHE ALSO HAS SERVED ON THE LOCAL HAZMAT TEAM, AND COMES FROM A FAMILY OF FIRST RESPONDERS.

Her research interests include critical infrastructure emergency planning and disaster management and application of risk analysis and systems theory to determine community level critical infrastructure, impacts on emergency management systems and target capabilities. She also studies exposure assessment, modeling of exposure scenarios, particularly hazardous material emergencies, and requisite response planning. Dr. Schneider’s current work includes the building of information fusion systems for regional response centers, creation of analytic hierarchical process models to measure community level operational resilience, and creation of models for emergency informational sharing over various networks. Multidimensional sustainability and analysis of sector based corporate sustainability related activities and management systems are also an area of interest. She has been the PI of over $1 million in research funding and been a co PI or senior personnel on another $1 million of funded research efforts.

Recently, Dr. Schneider has been appointed by Honorable NY Governor Andrew Cuomo to NY Respond Commission (2012-), created in response to Hurricane Sandy; the National Academy of Sciences, Offshore Windfarm Health and Safety Standards Committee (2012-2013)

**JENNIFER SCHNEIDER**

PROFESSOR
CIVIL ENGINEERING TECHNOLOGY, ENVIRONMENTAL MANAGEMENT & SAFETY DEPARTMENT
COLLEGE OF APPLIED SCIENCES & TECHNOLOGY

**Invited Presentations/Keynotes:** Hochgraf, Clark and Scott Wolcott. "Internationalization of Curriculum at Rochester Institute of Technology." Internationalisation: Myths, Realities, Challenges & Opportunities. Dublin Institute of Technology. Dublin, Ireland. 29 Sep. 2014. Conference Presentation. Δ

**Dean's Office**

**Md Abdullah al Faruque, Assistant Professor**


**Maureen S Valentine, Professor**


**Electrical, Computer & Telecommunications Engineering Technology**

**Miguel Bazdresch, Assistant Professor**


**Mark J Indelicato, Associate Professor**


SungYoung Kim, Assistant Professor


*Mark Indelicato, Department of Electrical, Computer, and Telecommunications Engineering Technology*


External Scholarly Fellowships:
1/1/2013-4/30/2014
Yamaha Corporation
Amount: $10,090 ≠

External Scholarly Fellowships:
12/1/2014-11/30/2015
Yamaha Corporation
Amount: $11,000 ≠

Drew Maywar, Assistant Professor


External Scholarly Fellowships:
8/4/2014-8/31/2015
Office of Naval Research
Amount: $46,468 £ ≠


Besim Agusaj  


Muhammet Kesgin, Assistant Professor  


Rick Lagiewski, Senior Lecturer  

**Published Game, Application or Software:** Lagiewski, Rick, et al. Finger Lakes Interactive Play. Phone or Smart Device App. IOS RIT Magic Center Empire State Development. 2014. ≠ 

Martin K Anselm, Assistant Professor  

Betsy Dell, Associate Professor  


**External Scholarly Fellowships:** 
7/15/2014-6/30/2015  
New York State Pollution Prevention Institute  
Amount: $60,006 ≠ 

Robert D Garrick, Associate Professor  
Spencer Kim, Associate Professor


James H Lee, Assistant Professor


Manian Ramkumar, Professor


Packaging Science

Carlos Diaz-Acosta, Assistant Professor


Changfeng Ge, Associate Professor


**Daniel Goodwin, Professor**

Biomedical Sciences

Cory A Crane, Assistant Professor


**Daniel B Ornt, Professor**


**Bolaji Thomas, Associate Professor**


BOLAJI THOMAS is an Associate Professor in the Department of Biomedical Sciences. He joined RIT in the fall of 2008 after completing a postdoctoral fellowship at the University of Pennsylvania. Research in Thomas’ lab is centered around 3 areas of interest. (1) Infectious Diseases (Malaria and Leishmaniasis), (2) Immunogenetics (Sickle cell disease) and (3) Zoonotic Diseases (Animal infections in humans). Specifically, the research program is interested in how polymorphisms of complement regulatory genes, which was found to display interethnic diversity and functional significance, affect disease pathophysiology in sickle cell disease.

The Thomas lab has shown that there are distinct and significant differences in the genotypic and allelic frequencies of these polymorphisms between sickle cell groups from Africa and the United States. Elucidating the role of these polymorphisms in disease and clinical implication is of interest to the Thomas group and others. The overarching goal of the project is to develop a new therapeutic approach for the treatment of sickle cell disease. The lab is also focused on deciphering how variations in individual’s genetic makeup affect susceptibility to disease co-morbidities among patients with sickle cell disease in Africa and other countries. In addition, the Thomas lab is also interested in elucidating the expression and kinetics of novel genes from persistent parasites in a disease called leishmaniasis.

The lab has forged a very enriching and fruitful collaboration with Dr. Betty Pace, Georgia Regents University and Dapa Diallo, University of Bamako, Mali, working together on sickle cell disease project. In addition, the lab has an ongoing collaboration with Dr. Ikhide Imumorin on the zoonoses project. These collaborations have led to 12 published peer-reviewed articles, with several more in press or in preparation.

Dr. Thomas is also involved in the scientific community as a member of the American Association for Immunologists and the Network of Minority Research Investigators, as a faculty mentor for the Federation of American Societies for Experimental Biology Maximizing Access to Research Careers (FASEB-MARC). In addition, Dr. Thomas currently serves on the board for the RIT Upstate Louis Stokes Alliances for Minority Participation (ULSAMP) and has been in the forefront of recruiting, training and mentoring undergraduate students in his research program. Dr. Thomas has also been involved as a PI or Co-PI on several grants funded by the National Institutes of Health and World Health Organization.
Hamad Ghazle, Professor


Medical Illustration

James Perkins, Professor


Cara Calvelli, Physician Assistant’s Program


Physician Assistant

Cara Calvelli, Associate Professor


Patricia Newcomb


John B Oliphant, Assistant Professor


School for American Crafts

**Andy Buck, Professor**


**Shows/Exhibits/Installations:** Buck, Andy. Spring Exhibition. 29 May 2014. Pritam & Eames, East Hampton, NY. Exhibit.

**Juan Carlos Caballero-Perez**


**Shows/Exhibits/Installations:** Caballero-Perez, Juan Carlos. Protective Ornament: Contemporary Amulets to Armor. 2014. Traveling Exhibition, Memphis. Exhibit.


**Peter J Pincus, Visiting Assistant Professor**


**Shows/Exhibits/Installations:** Pincus, Peter. Art Of The Pot. May 2014. Keith Kreeger Studios, Austin, TX. Exhibit.

**Shows/Exhibits/Installations:** Pincus, Peter. 2014 Yunomi Invitational. Apr. 2014. AKAR, Iowa City, IA. Exhibit.

**Shows/Exhibits/Installations:** Pincus, Peter. Occurance. Mar. 2014. NCECA Concurrent Exhibition, Milwaukee, WI. Exhibit.


**Invited Presentations/Keynotes:** Pincus, Peter. "Visiting Artist Demonstration and Lecture." West Virginia University Ceramics Department. West Virginia University. Morgantown, WV. 17, 18 Apr. 2014. Lecture.
Michael A Rogers, Professor

**Shows/Exhibits/Installations:** Rogers, Michael. BODYTALK. 14th to 28th Dec. 2014. Glasmuseet, Ebeltoft, Denmark. Exhibit.


---

Michael Amy, Professor


---

Elizabeth Kronfield, Associate Professor


ALEX LOBOS IS AN ASSISTANT PROFESSOR OF INDUSTRIAL DESIGN, MILLER PROFESSOR FOR INTERNATIONAL EDUCATION, AND EXTENDED PROGRAM FACULTY AT GOLISANO INSTITUTE FOR SUSTAINABILITY. HIS RESEARCH FOCUSES ON SUSTAINABLE DESIGN, EMOTIONAL ATTACHMENT AND USER-CENTERED DESIGN. HE ALSO WORKS ON ESTABLISHING COLLABORATIONS BETWEEN RIT AND INTERNATIONAL INSTITUTIONS, PARTICULARLY IN LATIN AMERICA AND ASIA.

Alex's research projects are often done in collaboration with industry partners. Since 2011 he has worked with CAD software leader Autodesk, exploring ideas around digital fabrication, computer modeling and design process. This collaboration has resulted in several conference presentations, award-winning student projects and involvement of RIT faculty and students in development of next-generation CAD programs. This collaboration has allowed the industrial design department to implement methods of digital fabrication and 3D printing into their curriculum. Another recent collaboration with General Electric focused on home appliances and sustainable behavior. Groups of students developed refrigeration and laundry concepts that improve environmental impact across the life cycle and engage users in more responsible use of their products, reducing energy and water consumption, among other benefits.

In 2014 Alex ran workshops at several universities, including: Universidad de Monterrey (UDEM), in México, and Pontificia Católica Universidad del Perú (PUCP), in Lima. The workshop at UDEM had students integrating eco-strategies with wearable technology in a variety of product categories, while the workshop at PUCP gathered over ninety students in industrial design to produce lines of office products that use emotional attachment to reduce procrastination. Alex also lectured at universities in México, Guatemala and Colombia, including a paper titled “Timelessness in Sustainable Product Design” at the International Conference of Design and Emotion, at Universidad de Los Andes, Colombia.

Alex's future plans include continuing his work with industry partners as well as establishing a network of design schools in North and Latin America who work together on projects around digital fabrication and social innovation.
Alan D Singer, Professor


**School of Design**

Clifford Wun, Associate Professor


Sarah E Thompson, Assistant Professor


Deborah A Beardslee, Associate Professor


Nancy A Bernardo, Assistant Professor

Judged National/International Competition Award Winner: Bernardo, Nancy A. Print Magazine. Regional Design Award Best in Region (East). Chicago, IL, 2014. *


Lorrie Frear, Associate Professor


Chris Jackson, Professor


Alex Lobos, Assistant Professor


**Invited Presentations/Keynotes:** Lobos, Alex. "Integrating Design and Emotion." 5th International Conference UDESIGN. Universidad de Monterrey. Monterrey, Mexico. 3 Mar. 2014. Conference Presentation.


Kelly M Murdoch-Kitt, Assistant Professor


Josh K Owen, Professor


School of Film and Animation

Meghdad Asadilari


Thomas D Gasek, Associate Professor

David L Long, Associate Professor


School of Media Sciences

Christopher Bondy, Visiting Assistant Professor


Shu Chang, Visiting Assistant Professor


**Robert Y Chung, Professor**


**Twyla Cummings, Professor**


**Elena A Fedorovskaya, Visiting Assistant Professor**


Scott L McCarney


Bruce Myers, Assistant Professor

Nick Paulus

Michael Riordan


Stephen Whittaker

School of Photographic Arts & Sciences

Roberley Bell, Professor
External Scholarly Fellowships:
10/29/2014-11/16/2104
Fulbright Specialist to Koc University Istanbul Turkey *


Meredith L. Davenport, Assistant Professor


Denis Defibaugh, Professor


Judged National/International Competition Award Winner: Defibaugh, Denis and Lorrie Frear. 43rd International Creativity Awards. Best of Show International Award to Positive Negative Magazine. Louisville, KY, 2014. *

Angela Kelly, Associate Professor


Michael R Peres, Professor


Christye P Sisson, Associate Professor

Joshua J Thorson, Visiting Assistant Professor

Edward K White

Dean’s Office

M Ann Howard, Professor


James Winebrake, Professor


Department of Communication

Ammina B Kothari, Assistant Professor

Hinda B Mandell, Assistant Professor


Kelly Martin, Assistant Professor


Jonathan Schroeder, Professor


JONATHAN SCHROEDER is the William A. Kern Professor of Communications in the School of Communication in the College of Liberal Arts. His research interests are in the intersections of branding, marketing communication, photography, and visual culture.

I am especially interested in photography and how it works within advertising, branding, social media, and strategic communication. RIT has been a productive place for my work.

An ongoing research project is to develop a series of historical and contemporary examples to trace a visual genealogy of the ubiquitous selfie. Preliminary work has identified several interdisciplinary ways of framing the selfie, including self-portraiture, the snapshot, and self-presentation. As a contemporary version of the self-portrait, the selfie, rooted as it is in participatory consumer culture of new media forms, can be characterized as a significant form of self-expression, in which power may be subtly shifting to the hands of the consumers from the owners of social networking and image-sharing sites, while at the same time generating concerns over appropriation, privacy, security, and surveillance.

For brands, selfies have been deployed as new strategic tools to promote brands as authentic, to invoke the “average consumer” as a credible product endorser, and to show how brands might fit in with consumers’ lifestyles. I have found that within strategic brand communication, selfies invoke a realist interpretive frame that supports a range of powerful, positive associations for consumers, while at the same time valorizing a sense of staged spontaneity, in the moment, “authentic” record of consumer experience. Insights from this project include how strategic uses of the selfie reveal shifts in the traditional functions of the advertising photograph, from sources of information, persuasion and representation to emblems of celebrity, digital existence, and social currency. By taking a close look at how strategic imagery utilizes the selfie, insight is gained into how contemporary visual culture articulates certain assumptions about authenticity and lived experience, and how such articulations construct viewers as consuming subjects.


Tracy Worrell, Associate Professor


Irshad Altheimer, Associate Professor

External Scholarly Fellowships:

10/1/2014-9/30/2016
Bureau of Justice Assistance (Project Safe Neighborhoods)
Amount: $299,961.00
*
John M Klofas, Professor


External Scholarly Fellowships:
7/1/2014- 6/30/2015
New York Division of Criminal Justice Services (Evaluation of New York's Gun Involved Violence Elimination Initiative)
Amount: $311,000.00
*

External Scholarly Fellowships:
8/31/2014- 1/20/2015
City of Rochester (2014 Evaluation of Pathways to Peace Street Outreach Program)
Amount: $50,000.00
*

External Scholarly Fellowships:
10/1/2014- 9/30/2017
New York Division of Criminal Justice Services (Assessment of Program Fidelity of Correctional Programs)
Amount: $224,690.00
*

External Scholarly Fellowships:
10/1/2014- 9/30/2016
Bureau of Justice Assistance (Project Safe Neighborhoods)
Amount: $299,961.00
*

John McCluskey, Professor


Laverne McQuiller, Associate Professor


Judy L Porter, Associate Professor


Christopher Schreck, Professor


Jason Scott, Associate Professor

Tony Smith, Associate Professor

Department of Economics

Amit Batabyal, Professor


Published Review: Batabyal, Amitrajeet A. Rev. of Mr. President, by H.G. Unger. Mr. President 2014: 1. Web. *


Jeffrey Wagner, Professor


Department of English

Cecilia Alm, Assistant Professor


Laura A Shackelford, Associate Professor


Dianna K Winslow, Assistant Professor


* Indicates print publication
£ Indicates electronic publication
∆ Indicates invited presentation/keynote

College of Liberal Arts 65
Department of History

Tamar Carroll, Assistant Professor


Joseph Henning, Associate Professor


Rebecca Scales, Assistant Professor


Corinna Schlombs, Assistant Professor


Nikolina Bozinovic


Elisabetta D’Amanda, Senior Lecturer


Department of Performing Arts and Visual Culture

Juilee Decker, Associate Professor


Rebecca J DeRoo


**Elizabeth Goins, Associate Professor**

**Invited Presentations/Keynotes:**


**Invited Presentations/Keynotes:**


**Invited Article/Publication:**


**Invited Article/Publication:**


**Invited Article/Publication:**


**Department of Philosophy**

**Evelyn Brister, Associate Professor**

**Journal Paper:**


**Brian Schroeder, Professor**

**Journal Editor:**


**Book Chapter:**


**Book Chapter:**


**Invited Presentations/Keynotes:**


**Invited Presentations/Keynotes:**


**Invited Presentations/Keynotes:**


**Invited Presentations/Keynotes:**

Invited Presentations/Keynotes:


Invited Presentations/Keynotes:


Katie Terezakis, Associate Professor

Journal Paper:


Journal Paper:


Invited Presentations/Keynotes:


Invited Presentations/Keynotes:


Lawrence Torcello, Assistant Professor

Journal Paper:


Invited Presentations/Keynotes:


Journal Paper:


Journal Paper:


Journal Paper:


Invited Paper:


Department of Political Science

Sarah M Burns, Assistant Professor

Invited Presentations/Keynotes:


Nathan Dinneen, Assistant Professor

Journal Paper:


Journal Paper:


Joseph Fornieri, Professor

Ryan Garcia, Assistant Professor

Lauren Hall, Assistant Professor

Sean D. Sutton, Associate Professor

Department of Psychology

Jessamy E Comer, Visiting Assistant Professor

Caroline M DeLong, Associate Professor


Nicholas DiFonzo, Professor
Babak Elahi, Professor


Jennifer A Lukomski, Professor


Edona Maloku

External Scholarly Fellowships:
9/1/2014-2/1/2016 Regional Research Promotion Programme (RRPP)
Amount: 28,340 US Dollars (Kosovo's Portion), total amount of the research project is 203,086 US Dollars ≠


Vincent Pandolfi, Associate Professor


Esa Rantanen, Associate Professor


Lindsay S Schenkel, Associate Professor

Department of School Psychology

Suzanne B Graney, Associate Professor

Department of Sociology & Anthropology

Nathan W Fisk, Visiting Assistant Professor

Eric Hittinger, Assistant Professor

Christine Keiner, Associate Professor

Hang R Na


Department of Science Technology and Society/ Public Policy

Brian Barry, Associate Professor

Conerly Casey, Associate Professor


Kijana Crawford, Associate Professor


Babak Elahi, Professor


Kristin M Kant-Byers


Benjamin N Lawrance, Professor


Uli Linke, Professor


David C Meiggs, Assistant Professor


William D Middleton, Associate Professor


Jessica W Pardee, Assistant Professor


Oral N Robertson, Lecturer


Shana L Siegel, Visiting Assistant Professor


Danielle T Smith, Professor


Robert Ulin, Professor

Charles Bachmann


Stefi Baum, Research Professor


Scott Brown


A G. DiFrancesco


Mark Fairchild, Professor


Jason Faulring


James A. Ferwerda, Associate Professor


Michael Gartley, Research Assistant Professor


Aaron Gerace


Richard K. Hailstone, Associate Professor


Maria Helguera, Associate Professor


MISHKAT BHATTACHARYA is an Assistant Professor in the School of Physics and Astronomy. His research interests are centered on the theoretical investigation of sensors that operate near the limits set by quantum physics.

Sensors are ubiquitous in modern society, and are present in cell phones, computers, televisions, cars, ships, planes, and satellites, to name a few devices. These sensors are capable of detecting quantities such as position, speed, acceleration, rotation, radio signals, etc.

Fabrication techniques have advanced so much that several sensing technologies are now coming up against the limits posed to their ultimate sensitivities by quantum physics. In order to describe the sensor functioning accurately, these quantum limits need to be characterized precisely. Furthermore, it turns out that these limits can sometimes be circumvented by creatively using resources presented by quantum physics itself.

Bhattacharya’s research, which is supported by the Research Corporation for Science Advancement, the Office of Naval Research, and the National Science Foundation, is focused on understanding a class of sensors which typically use a mechanically moving part as a detector, and an optical beam as a readout. A variety of systems fall under this category, including nanomembranes, micromirrors, and optically levitated particles. These elements can be used to make highly sensitive accelerometers, magnetometers, and thermometers, for example. Bhattacharya collaborates with several experimental groups that investigate such systems.

Bhattacharya’s work combines perspectives and techniques from physics, mathematics, chemistry and engineering, and involves undergraduate and graduate students, as well as postdoctoral researchers. He collaborates with faculty at RIT, locally in Rochester, nationally, as well as internationally. Currently his group is working on investigating the quantum limits to the detection of mechanical rotation, which is important to velocimetry, viscometry (the measurement of viscosity in a fluid), atomtronics (circuits made of moving atoms), and quantum information science.


Emmett Ientilucci, Research Assistant Professor


Joel Kastner, Professor


John Kerekes, Professor


Robert Kremens, Research Professor


Poorna Kushalnagar, Research Assistant Professor


David Messinger, Associate Professor


Rupal Mittal


Christopher O'Dea, Research Professor


Jeff Pelz, Professor


Joe Pow


Jie Qiao, Associate Professor


N Rao, Research Professor

Nina Raqueno


Harvey Rhody, Professor

Eli Saber, Professor

Carl Salvaggio, Professor


John Schott, Research Professor


Grover Swartzlander, Associate Professor


Jan van Aardt, Associate Professor


Anthony Vodacek, Professor


Derek J. Walvoord


Richard Zanibbi, Associate Professor


Mark Fairchild, Professor


Susan Farnand, Visiting Assistant Professor


Val Hemink


Andre Hudson, Associate Professor


School of Chemistry and Materials Science

Christopher J Collison, Associate Professor


Paul A Craig, Professor


Nathan C Eddingsaas, Assistant Professor


Lea Michel, Assistant Professor


Casey W Miller, Associate Professor


Kalathur S Santhanam, Professor


**Hans F Schmitthenner, Lecturer**


**Gerald Takacs, Professor**


**Scott Williams, Professor**


**School of Life Sciences**

**Larry Buckley, Associate Professor**


**Sandra J Connelly, Assistant Professor**


**Feng Cui, Assistant Professor**


**Irene Evans, Professor**


**Andre Hudson, Associate Professor**


**Journal Paper:** Gan, HY, et al. "Whole Genome Sequences of Four Oligotrophic Bacteria Isolated From Deep Within a Cave (>400 M): Lechuguilla Cave, New Mexico." Genome Announcements. 2. 6 (2014): 0. Web. *


Kara Maki, Assistant Professor

Dina Newman, Assistant Professor


Michael Osier, Associate Professor

Michael Savka, Professor


Gary R Skuse, Professor

Susan Smith, Assistant Professor


Hyla Sweet, Associate Professor


Anna Tyler, Associate Professor


**Leslie Kate Wright, Assistant Professor**


**School of Mathematical Sciences**

**Ephraim Agyingi, Associate Professor**


**Nathaniel S Barlow, Assistant Professor**


**Bernard Brooks, Professor**


**Elizabeth Cherry, Associate Professor**


David L Farnsworth, Professor


Raluca Felea, Associate Professor


Baasansuren Jadamba, Assistant Professor


Kara Maki, Assistant Professor


Laura M Munoz, Assistant Professor


Darren A Narayan, Professor


Richard O'Shaughnessy, Assistant Professor


J A Stephen Viggiano

Paul Wenger, Assistant Professor


John Whelan, Associate Professor


Yosef Zlochower, Associate Professor


School of Physics and Astronomy

Linda S Barton, Associate Professor


Mishkatul Bhattacharya, Assistant Professor


Scott Franklin, Professor


Dehui Hu, Lecturer


Aaron McGowan, Lecturer


David Merritt, Professor


Christopher O’Dea, Research Professor


**Andrew Robinson, Professor**


Robert B Teese, Professor


George Thurston, Professor


Benjamin M Zwickl, Assistant Professor


**Accounting**

**Rong Yang, Associate Professor**


**Decision Sciences**

**A Erhan Mergen, Professor**


**Economics**

**Steven C Gold, Professor**


**Finance**

**Chun-keung Hoi, Professor**


**Hao Zhang, Assistant Professor**


**International Business**

**Zhi Tang, Associate Professor**


**Management**

**Darline Augustine, Assistant Professor**


**Benjamin H Deitchman, Visiting Assistant Professor**


**Richard DeMartino, Associate Professor**


**John E Ettlie, Professor**


**Clyde Hull, Associate Professor**


**Shal Khazanchi, Associate Professor**


MICHAEL PALANSKI IS AN ASSOCIATE PROFESSOR OF MANAGEMENT IN THE
SAUNDERS COLLEGE OF BUSINESS. HIS RESEARCH FOCUSES ON LEADERSHIP
AND ETHICS IN THE WORKPLACE.

Dr. Palanski’s research has focused on the importance of behavioral integrity
for individual leaders and for teams. Leaders are effective when they behave
in certain ways: conveying a compelling vision of the future, motivating employ-
ees, challenging the status quo, facilitating effective teamwork, and thinking
strategically. However, Dr. Palanski’s research shows that when leaders fail to
do these things in an ethical manner, almost all of these good actions end up
actually doing more harm than good. For instance, one of the surest ways for
a leader to fail is for the leader to convey a mismatch between his/her words
and actions. Conversely, when the leader conveys behavioral integrity (that is,
consistency between words and actions), the leader is able to build trust with
employees and, as a result, good things usually happen.

Dr. Palanski’s more recent work is focusing on a new approach to leadership
development called multi-domain leadership. Most existing models of leader-
ship development focus on the actions of the leader in the workplace. However,
many leaders experience growth by leading in areas outside of the workplace
– perhaps as a volunteer in a not-for-profit organization or even in the home as
a parent. Dr. Palanski and his colleagues in the U.S. and Ireland are exploring
how leaders who intentionally seek developmental opportunities outside of
work can become more effective leaders. They have developed an innovative
360 degree survey that provides developmental feedback across the domains
of work, community life, and the personal life of family and friends. This survey
is currently being used in Executive MBA programs at the University of Limerick
(Ireland), Purdue University Calumet, and RIT.

MICHAEL PALANSKI
ASSOCIATE PROFESSOR
MANAGEMENT
SAUNDERS COLLEGE OF BUSINESS
Chih I Liu, Assistant Professor


dt ogilvie, Professor


Joy Olabisi, Assistant Professor


Michael Palanski, Associate Professor


Sandra Rothenberg, Professor


Management Information Systems

Sean W Hansen, Assistant Professor


Manlu Liu, Assistant Professor


Yang Yu, Assistant Professor

Adriana M Boveda, Assistant Professor

Vincent M Landers, Assistant Professor


Joseph C Miller, Assistant Professor

Rajendran S Murthy, Assistant Professor


Robert B Boehner, Senior Lecturer

Marketing
Master of Architecture

J Chiavaroli, Professor


Ming Hu, Assistant Professor


PhD in Sustainability

Callie Babbitt, Assistant Professor


External Scholarly Fellowships:
8/1/2014 - 7/31/2017
National Science Foundation
Amount: 300,854
* ≠

Roger B Chen

Gabrielle Gaustad, Assistant Professor


GABRIELLE GAUSTAD IS AN ASSOCIATE PROFESSOR IN THE GOLISANO INSTITUTE FOR SUSTAINABILITY. HER RESEARCH FOCUSES ON THE SUSTAINABILITY IMPLICATIONS OF MATERIALS AT THEIR END-OF-LIFE.

A major sustainability challenge of the 21st century is exponentially increasing consumption of materials and the related energy and waste burden. The Gaustad group conducts research quantifying the economic and environmental trade-offs for materials at their end-of-life with a focus on recycling and resource recovery. Methodologies include a variety of systems modeling techniques such as dynamic material flow analysis, optimization, simulation, systems dynamics, economic modeling, process based cost modeling, and life-cycle assessment, as well as traditional material characterization such as TGA, PSD, SEM, XRD, XRF, EDS, and ICP-MS. This unique combination of systems thinking, computational engineering, and fundamental material characterization has resulted in a successful research program resulting in student recognition, significant external funding, and high impact publications.

Specific projects include environmentally benign and economically efficient recycling of lithium ion batteries, particularly those containing nanomaterials, implications of material scarcity and criticality for next generation PV production and rare earth metals, and aluminum recycling technologies and compositional analysis. In 2014, Dr. Gaustad published 9 peer-reviewed high impact publications, all with RIT graduate students as first authors, in journals such as Applied Energy and the Journal of Environmental Management. Dr. Gaustad is active in the promoting the success of under-represented groups in the STEM disciplines. She advised two female students who earned their PhDs in 2014 and has served as a McNair mentor, ACS SEED scholar advisor, and participates in the WE@RIT summer camps for 4-6th grade girls.

Since arriving at RIT, Gaustad has received over $1M in external funding which has been used to support PhD, MS, and undergraduate student education and research. In 2015, Dr. Gaustad was awarded the prestigious Faculty Early Career Development (CAREER) Award from the National Science Foundation to study supply chain gaps for scarce clean energy materials and develop novel metrics to assess their criticality.


Nabil Nasr, Professor


Thomas Trabold, Associate Professor


Eric Williams, Associate Professor


Research Centers

Nenad Nenadic, Research Associate Professor

**Biomedical Engineering**

**Thomas R Gaborski, Assistant Professor**


**Behnaz Ghoraani, Assistant Professor**


Published Conference Proceedings:


Blanca H Lapizco-Encinas, Associate Professor


MEHRAN MOZAFFARI KERMANI is an Assistant Professor in the Electrical and Microelectronic Engineering Department in the Kate Gleason College of Engineering. His research interests lie in the fields of deeply-embedded system security, cryptographic engineering, and ASIC/FPGA reliability.

Unlike traditional embedded systems, nowadays, emerging computing systems are embedded in every aspect of human lives. These deeply-embedded computing systems often perform extremely sensitive tasks, and in some cases, such as health-care IT, these are life-saving. Thus, in addition to the security threats to traditional embedded systems, emerging deeply-embedded computing systems exhibit a larger attack surface, prone to more serious or life-threatening malicious attacks. As such, new trends for providing security for deeply-embedded systems are emerging; many of which abandoning use of cryptographic computations or make use of lightweight crypto-systems, feasible for these computing platforms.

Mehran Mozaffari Kermani works concurrently on three research topics. Part of his research group works on cryptographic engineering. In short, the research group is involved in the design, implementation, and optimization of crypto-systems in embedded hardware and software. In addition, the group actively works on emerging topics in side-channel analysis attacks and countermeasures. His research group also conducts research on emerging areas in embedded systems security, applicable to constrained, sensitive nodes in different applications ranging from industrial networks to implantable and wearable medical devices deeply embedded in human body. Moreover, the research group is actively involved in providing reliability approaches for vulnerable implementations of crypto-systems to natural/malicious faults. Currently, he is serving as an Associate Editor for the ACM Transactions on Embedded Computing Systems and the lead Guest Editor for the IEEE/ACM Transactions on Computational Biology and Bioinformatics. Moreover, he has served as the lead Guest Editor of the IEEE Transactions on Emerging Topics in Computing.

Mehran Mozaffari Kermani is working very closely with the Computer Engineering Department and especially with Reza Azarderakhsh, one of the well-known researchers in Cryptographic Engineering. Specifically, he works with Reza Azarderakhsh on editing well-known IEEE Transactions journals, publishing research articles on cryptography and embedded systems security, supervising graduate students, and attracting external fund. This close collaboration across departments in a research area that is of strategic significance for RIT as well as for society has been (and is expected to be) a pivotal plan for both Mehran and Reza.

MEHRAN MOZAFFARI KERMANI
ASSISTANT PROFESSOR
ELECTRICAL AND MICROELECTRONIC ENGINEERING
KATE GLEASON COLLEGE OF ENGINEERING
Cristian A Linte, Assistant Professor


Center for Quality and Applied Statistics

Peter Bajorski, Professor


Daniel R Lawrence, Professor


Chemical Engineering

Karuna Koppula, Lecturer


Brian Landi, Associate Professor


Reginald E Rogers, Assistant Professor


Steven Weinstein, Professor


Computer Engineering

Reza Azarderakhsh, Assistant Professor


Juan Cockburn, Associate Professor

Amlan Ganguly, Assistant Professor


Kenneth Hsu, Professor

Invited Presentations/Keynotes: Hsu, Kenneth W. "C Language Modules for K60 Developed at RIT." Freescale Alliance University Professors Meeting. Freescale Inc, Taiwan and National Taipei University of Science and Technology. Taipei, Taiwan. 24 Oct. 2014. Lecture.


Dhireesha Kudithipudi, Associate Professor


Andres Kwasinski, Associate Professor

Sonia Lopez Alarcon, Assistant Professor


Marcin Lukowiak, Associate Professor


Roy Melton, Senior Lecturer


Andreas Savakis, Professor


Raymond W Ptucha, Assistant Professor


Shanchieh Yang, Associate Professor


Electrical and Microelectrical Engineering

David Borkholder, Associate Professor


**Sohail Dianat, Professor**


**Mark A Hopkins, Professor**


**Santosh Kurinec, Professor**


**Sildomar T Monteiro, Assistant Professor**


**Mehran Mozaffari Kermani, Assistant Professor**


Dorin Patru, Associate Professor


Ferat Sahin, Professor


Lamia X Tchoketch-Kebir

Published Conference Proceedings:

Boutheina K Tlili


Gill Tsouri, Associate Professor


Jayanti Venkataraman, Professor


Industrial and Systems Engineering

Denis Cormier, Professor


Marcos Esterman, Associate Professor

Scott Grasman, Professor


Michael Kuhl, Professor


Matthew Marshall, Associate Professor


Ruben Proano, Assistant Professor


Rachel T Silvestrini, Associate Professor


Brian Thorn, Associate Professor


Mechanical Engineering

Wael Abdel Samad


Margaret Bailey, Professor


Stephen Boedo, Professor


Steven Day, Associate Professor


Hany Ghoneim, Professor


Amitabha Ghosh, Professor


Mario Gomes, Assistant Professor


Surendra Gupta, Professor


Edward C Hensel Jr., Professor


Patricia Iglesias Victoria, Assistant Professor


Satish Kandlikar, Professor


Kathleen Lamkin-Kennard, Associate Professor


Alexander S Liberson, Lecturer


Risa Robinson, Professor


Michael Schertzer, Assistant Professor


---

**Michael Schrlau, Assistant Professor**


---

**Robert J Stevens, Associate Professor**


---

**Benjamin Varela, Associate Professor**


P Venkataraman, Associate Professor


Microsystems Engineering

Zhaolin Lu, Associate Professor


Jiandi Wan, Assistant Professor


Faculty Scholarship Report 2014

Academic Affairs

Geoff Poor, Professor

Published Game, Application or Software:


American Sign Language and Interpreting Education

Kathryn Schmitz, Associate Professor


Kim Kurz, Assistant Professor


Campbell A McDermaid, Assistant Professor


BONNIE JACOB, ASSISTANT PROFESSOR IN THE SCIENCE AND MATHEMATICS DEPARTMENT AT NATIONAL TECHNICAL INSTITUTE FOR THE DEAF, RESEARCHES NETWORKS AND THE THEORY OF HOW DIFFERENT PHENOMENA MOVE ALONG THEM.

Graph theory, the investigation of structures that model pairwise relationships among objects, is the subject of Dr. Jacob’s research. In particular, Dr. Jacob and her team investigate topics at the interface of graph theory and mathematical fields such as linear algebra. Currently, the team’s research, supported by the Center for Undergraduate Research in Mathematics (CURM), focuses on a particular area known as zero forcing, a collection of dynamical systems on graphs or networks that relate to linear algebra and quantum mechanics as well. Conventional research on zero forcing has focused on finding the minimum number of starting locations in a system to spread a phenomenon to the entire system. Dr. Jacob’s research team introduced and investigated the novel idea of determining the maximum number of locations at which the phenomenon can be present, yet not spread to the entire network.

In addition, Dr. Jacob researches the area of combinatorial matrix theory together with collaborators at universities across the country. The group researched the zero diagonal minimum rank problem, resulting in a publication this year, and continues to pursue related research.

Involving deaf and hard-of-hearing undergraduate students in mathematics research is a passion of Dr. Jacob’s. She has supervised six deaf or hard-of-hearing undergraduate students in research since coming to RIT. This year, Dr. Jacob’s students presented their original research on failed zero forcing at two conferences. The team has one article accepted for publication and is currently working on submitting more. Dr. Jacob actively encourages faculty across the United States to involve deaf and hard-of-hearing students in research, including publishing an article with RIT faculty co-authors on how to successfully involve deaf and hard-of-hearing students in research.

BONNIE JACOB
ASSISTANT PROFESSOR
SCIENCE AND MATHEMATICS
NATIONAL TECHNICAL INSTITUTE FOR THE DEAF


Christine Monikowski, Professor


Deirdre Schlehofer, Assistant Professor


Grants: Schlehofer, Deirdre, et al (2/14-8/14). Effective Mentoring and Leadership Skills for Deaf and Hard of Hearing Women Faculty at NTID/RIT. Grant received/funded by ADVANCE-CERIT Connect Grants, National Science Foundation (NSF) under Award No. HRD-1209115.

Art and Imaging Studies

Frank Argento, Associate Professor

David S Cohn, Associate Professor


Paula Grcevic, Professor


Michael J Voelkl, Associate Professor


ASLIE - Research

Deirdre Schlehofer, Assistant Professor


Communication Studies and Services

Linda Gottermeier, Associate Professor


Joseph Bochner, Professor


Luane Haggerty, Senior Lecturer


J Matt Searls, Associate Professor


Information and Computing Studies

Karen Beiter, Assistant Professor


Raja Kushalnagar, Assistant Professor


Liberal Studies

Jessica Cuculick, Assistant Professor


Kathleen Eilers-crandall, Associate Professor

Pamela Kincheloe, Associate Professor


John-Allen Payne, Associate Professor


Liberal Studies- Research

Gerald Berent, Professor


Vincent J Samar, Associate Professor


Christopher Kurz, Associate Professor


Sara Schley, Associate Professor

Carol De Filippo, Professor


Ila Parasnis, Professor


Michael Stinson, Professor


Office of the President
Marc Marschark, Professor


Invited Presentations/Keynotes: Marschark, M. "Deaf Children's Language and Learning: What We Know and What We Think We Know." Cecil H. and Ida Green Honors Chair Communication Sciences and Disorders Lecture. Texas Christian University. Fort Worth, TX. 20 Feb. 2014. Guest Lecture.


Research and Teacher Education

Marc Marschark, Professor


Science and Mathematics

Austin Gehret, Assistant Professor


Bonnie Jacob, Assistant Professor


Matthew Lynn, Associate Professor


Keith Mousley, Associate Professor


Manuscripts Submitted for Publication: Mousley, Keith and Christopher A.N. Kurz. "Pre-College Deaf Students? Understanding of Fractional Concepts: What We Know and What We Do Not Know." 30 Apr. 2014. MS- manuscript (handwritten). *

Jason T Nordhaus, Assistant Professor


Todd Pagano, Associate Professor


External Scholarly Fellowships:

12/19/2014- 12/19/2019
Dept. of State/Council for International Exchange of Scholars
Amount: 15,000 £


Manuscripts Submitted for Publication:

Smith, Susan B., Annemarie D. Ross, and Todd Pagano. "Conducting Undergraduate Research with Deaf and Hard-of-Hearing Students in the Chemical and Biological Sciences." 25 Nov. 2014. TS- typescript (typed). *


Annemarie Ross, Associate Professor


Sharron Webster, Lecturer

Albina Balidemaj


Published Conference Proceedings:

Festina Balidemaj

Published Conference Proceedings:


Daniel Cosentino, Lecturer


David C Eustice


Julie M Kolgjini, Lecturer


Nita Luci


Center for Multidisciplinary Studies

Cathryn R Leyland, Lecturer


Thomas Moran, Professor


WAEL ABDEL-SAMAD IS AN ASSISTANT PROFESSOR IN THE MECHANICAL ENGINEERING DIVISION AT RIT’S CAMPUS IN DUBAI. HE RECEIVED HIS PHD FROM THE UNIVERSITY OF WISCONSIN – MADISON IN 2013 AND HIS RESEARCH INTERESTS LIE IN THE FIELDS OF HYBRID EXPERIMENTAL MECHANICS AND NONDESTRUCTIVE TESTING (NDT).

Motivated by the need for full-field experimental techniques for the stress analysis of perforated structures, Abdel-Samad’s research combines analytical principles of elasticity with experimental techniques to analyze and better understand complicated structural problems. More specifically, his research efforts to date have focused on investigating and determining the full-field state of stress of perforated structures having unknown loading condition through hybridizing a variety of different NDT approaches. Such approaches include thermoelastic stress analysis, photoelastic stress analysis, and more recently digital image correlation (DIC).

Abdel-Samad’s latest research project was a collaborative one done on a perforated asymmetrical cooling vehicle structure utilizing DIC. The major advantage of this work was the ability to achieve full-field stress information when only a single component of displacement was physically measured. He is set to present the findings from this research project at the Society of Experimental Mechanics’ upcoming annual conference in June 2015 in Costa Mesa, CA where he will also be serving as a chair of the Infrared Imaging session. Abdel-Samad and his collaborators are currently working on applying similar concepts of hybrid mechanics to unsymmetrically loaded mechanical fasteners in an effort to achieve a full-field separation of thermoelastic stresses at the complex contact region.

More recently, and along with other colleagues from RIT – Dubai, Abdel-Samad was awarded a grant from Emirates Global Aluminum, UAE to apply his work on nondestructive testing and evaluation to monitor corrosion levels in aluminum casting facilities; corrosion being a typical problem in such environments as a result of the continuous swing in the cooling water chemistry.

WAEL ABDEL-SAMAD
ASSISTANT PROFESSOR
MECHANICAL ENGINEERING
RIT DUBAI


Office of Graduate Studies

Jasminka Samardzija


RIT Croatia

Jasminka Samardzija


RIT Dubai

John Dayton


Ioannis Papaefstathiou


**Mohamed A Samaha**


