Welcome

It is a new semester, and time to update CIFFI Members and Friends on the many activities of CIFFI, CIFFI Fellows, and FSAD Students. We are pleased that CIFFI has now been in existence over a year, and we have made great progress. We have new members, on-going research and planned events. We welcome your suggestions and ideas for collaborations. Please check our website periodically for updates. CIFFI Website.

Upcoming Events

April 11, 2015    Cornell Fashion Collective Runway Show

May 18, 2015    CIFFI Spring Symposium: Advances in Fiber Science and Performance Apparel.

Stylish Maternity Clothing with Wearable Technology Wins Geoffrey Beene National Scholarships

Senior Blake Uretsky has won one of four $30,000 Geoffrey Beene national scholarships from the YMA Fashion Scholarship Fund for her stylish line of maternity clothing incorporating wireless wearable technology to send vital health data to a smart phone. This is the second year in a row that an FSAD student has won a Geoffrey Beene national scholarship and fourth in the past seven years. FSAD students Eric Beaudette, Nicole Cember, Sydney Conner, Megan Rodrigues, Samantha Stern, Hannah Wheeler, and Laura Zwanziger each earned $5,000 awards for their case study entries to the competition. Learn more.

CIFFI Fellows Receive Grant to Research Thermoregulatory Undergarments

Professor Jintu Fan, Assistant Professor Tasha Lewis, Assistant Professor Huiju Park, along with Professor Edwin Kan, Electrical Engineering, Cornell, and Associate Professor Ronggui Yang, Mechanical Engineering, University of Colorado at Boulder, have received a $3 million dollar grant from the U.S. Department of Energy’s Advanced Research Projects Agency. They propose to create undergarments that can warm or cool the body by moving air through very fine tubing. Wearable sensors will trigger the flow of warm or cool air. Such “thermo-regulatory” technology could allow buildings to be kept at cooler temperatures, thus saving energy. Read more.

Highlights

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Left to Right: Jintu Fan, CIFFI Director and FSAD Department Chair; Tasha Lewis, and Huiju Park, CIFFI Faculty Fellow; Edwin Kan, Electrical Engineering Professor; Yuen Shing Wu, Fiber Science and Apparel Design Research Associate.

Blake Uretsky's design accommodates the changing physique of pregnant women.

A smartphone app displays readings from Uretsky's clothing.
CIFFI Director Fan Named to Woo Professorship

Department Chair and Professor Jintu Fan (Bio page) was named the Vincent V.C. Woo Professor in Fiber Science and Apparel Design last summer. This is a newly endowed professorship created by Alice Woo, M.S. '75 in memory of her father, Vincent V.C. Woo, a textile entrepreneur in China. Professor Fan, in addition to his roles as FSAD Department Chair and CIFFI Director, actively conducts research focused on improving the understanding of the interaction between human body, clothing and environment, and developing clothing with enhanced functional performance and aesthetic appearance. Read more.

Frey Appointed Associate Dean

Associate Professor Margaret Frey (Bio page) is the new Associate Dean for Undergraduate Affairs for the College of Human Ecology. She was selected based on her strength as a mentor for both graduate and undergraduate students, commitment to the college's rigorous academic program and learning goals, and her innovative teaching. Professor Frey conducts research at the intersection of fiber science and nanotechnology.

Outstanding Research Award

At the 2014 International Textile and Apparel Association Conference, Assistant Professor Denise Green won the Intellect Books 2014 Research Award for her presentation, "Mind-Body Transformations: Appearance and Yoga in the Hot Room". The award recognizes outstanding research on the cultural and social influences affecting fashion and dress. Professor Green, (Bio page), joined the FSAD faculty for the fall semester. She obtained her PhD in Anthropology at the University of British Columbia, her M.S. in Textiles at University of California, Davis, and her B.S. in Fiber Science and Apparel Design at Cornell. She is particularly interested in socio-cultural aspects of style, fashion, and dress. In addition to teaching and research, Professor Green is the new director of the Cornell Costume and Textile Collection.

Netravali Designated McLean Professor

Professor Anil Netravali (Bio page) has been named the first Jean & Douglas McLean Professor in Fiber Science & Apparel Design. This professorship was recently endowed by the estates of Jean and Douglas McLean. Jean was an emeritus professor of the FSAD department. Professor Netravali’s research focuses on fiber reinforced composites and green materials.
CIFFI Fellows Awarded Project Jumpstart Research Grants

The Cornell Center for Materials Research announced new awards for small business collaborative research project funding under the JumpStart program, funded by Empire State Development’s Division of Science, Technology and Innovation (NYSTAR).

- Buckingham Manufacturing Co., Inc. of Binghamton, NY, will collaborate with Professor Juan Hinostraza in the development of an innovative tell-tale indicator. This indicator will visually show the effects of UV degradation in Nylon and alert the user to a potentially dangerous condition.
- North Brook Plastics LLC, Auburn, NY, will collaborate with Professor Anil Netravali to perform accelerated aging tests on plastic plywood sheets made of 100% low grade recycled materials manufactured using a powder impression molding (PIM) process.
- Performax Sports LLC, Buffalo, NY, will collaborate with Professor Huiju Park to develop a cut-resistant neck protection device for ice hockey players that is durable, washable, and wearable.
- Previous fiber science collaborations by Professor C.C. Chu, Professor Anil Netravali, and Professor Margret Frey are reported in this article. Read more.

CIFFI Fellows Win Sustainability Competition

Professor Anil Netravali, Assistant Professor Tasha Lewis and Assistant Professor Huiju Park, with students Ariana Levitt, Vanessa Sanchez, Jianan Su, & Helen Trejo won the TCAM 2014 Sustainability Poster Competition at the Atkinson Center for a Sustainable Future on campus in October. Their poster was “Changing the Climate on Sustainable Fashion: Equipment and Process Development for Management of Post-Consumer Textile Waste.” Learn more.

Netravali Composite Book Published

Professor Anil Netravali is editor, with Christopher Pastore, of a new book, Sustainable Composites, Fibers, Resins and Applications, published by DEStech Publications, Inc. in 2014. Extension Associate Fran Kozen co-authored a chapter, as did several FSAD graduates.
Metal Organic Framework Nanofibers as Art
Professor Juan Hinestroza, Associate Professor So-Yeon Yoon, Design and Environmental Analysis, and FSAD visiting scientist Ruya Ozer created an interactive exhibit “Nanowhere: Gas In, Light Out”, for the 2014 Cornell Council of the Arts Biennial, “Intimate Cosmologies: The Aesthetics of Scale in an Age of Nanotechnology”. Their exhibit showed the use of metal-organic frameworks (MOFs) as sensors to detect methane gas. Read more.

CIFI Activities
Campus Symposium
A CIFI Symposium, Advances in Fiber Science and Performance Apparel, will be held at Cornell on May 18, 2015. There will be technical presentations by CIFI Fellows and others, student poster presentations, and opportunities to visit laboratories. The Cornell Center for materials Research is holding a symposium, Frontiers in Polymer Synthesis: Exploring New Opportunities for Structural Control and Applications of Functional Materials on May 19, which may also be of interest to some of you. Read more. You will receive further information on the CIFI symposium via email.

Sponsored Research
We Several CIFI-sponsored collaborative research projects are now under way in the FSAD department. Cornell students are willing and interested collaborators for those of you able to work within an academic time frame. Please contact us with your ideas and questions. Learn more.

New Members
CIFI welcomed HanesBrands, Inc. as a founding member, under the leadership of Mike Abbot, Director of Research. The Hanes Research Group is located in Rural Hall, N.C. and also has a trend and innovation lab in New York. Hanes is a manufacturer and marketer of leading brands of innerwear and activewear, with an interest in product innovation.

Bemis Associates, Inc. of Beverley, MA, has become a CIFI corporate member. Bemis specializes in thermoplastic adhesives, tapes, and films for apparel, footwear, and industrial purposes. Innovative applications for performance active-wear have enabled production of ultra-lightweight garments.

Allie Thielens, a 2011 FSAD graduate, joined CIFI as an individual member. Allie is Co-Founder and Director of Design and Production of Ninox, a newly launched menswear label based in Boulder, CO. Ninox features performance outerwear made of luxury fabrics manufactured in North America.
Roundtable 2014

Presentations from the September CIFFI Roundtable are now available on the CIFFI website.

- Prof. Susan P. Ashdown
  3-D Body Scanning Opportunities for Custom Manufacturing
- Jose P. Chan, Parsons The New School for Design
  Retail Technology Trends
- Prof. Denise Green
  An Anthropological Approach to Fashion Studies
- Harry Lee, TAL Apparel Unlimited
  Thoughts on Supply Chain
- Autumn Newell,
  Sustainability Team at Cornell University
- Yingying Wu,
  A Cross Cultural Study of Women's Body Image Issues, Appearance Management Strategies and Attitudes toward 3D Technology

Trade Show Industry Presentation

CIFFI sponsored a presentation to retailers and brand representatives at the Coterie Trade Show at the Javits Center in New York in September. The panel discussion, “The future of a digital and data driven fashion industry: consumer and retailer gains from the startup frontier”, was moderated by Assistant Professor Tasha Lewis. CIFFI will be looking for future opportunities to engage industry with cutting edge research.

FSAD Student Accomplishments

International Textile and Apparel Association Conference Student Awards

Graduate student Kristen Morris received the Lois Dickey Fellowship for Continuing Doctoral Students at the 2014 conference of the International Textile and Apparel Association. Among the criteria for her award was potential for future contributions to and leadership in the textiles and apparel professional. Dale Kinney ’14 won the Eden Travel Grant.

AATCC Foundation Student Research Support Grants

Minji Kim has been awarded an AATCC Foundation Student Research Support grant to support her PhD research “Breathable Piezoelectric Fibrous Membranes and Breathable Electrodes”. Kristen Morris has also received AATCC Foundation support, for her research “Implications of Users and Facilitation on Innovation in Functional Apparel Design”. Look for future reports on this research in the AATCC Journal of Research.
National Make it With Wool Fashion Design Competition Winners
CIFFI Student member, graduate student Kristen Morris won first place in the National Make it With Wool Fashion Design Competition, while sophomore Samantha Stern placed second. Kristen will show her design at the 2015 National Fashion show. Objectives of this competition include promoting the beauty and versatility of wool fabrics and yarns as well as encouraging creativity in use of wool fabrics and yarns.

Barbara L. Kuhlman Foundation Awards
The Barbara L. Kuhlman Foundation awards grants annually for Fiber and Wearable Arts, each year around a different theme. FSAD undergraduates Molly Kestenbaum, Rachel Kwong, Rachel Powell, Kennedy Rauh, Alyssa Saunders, Samantha Stern, Robin Reynolds, displayed their creations, themed this year around use of leather, in September. Read more.

Other FSAD News
Undergraduate Major Restructuring
The undergraduate majors in Fiber Science and Apparel Design have been restructured to reflect career paths sought by students. There is now a Bachelor of Science in Fiber Science and a Bachelor of Science in Fashion Design and Fashion Design Management, with concentration in either. Offering a separate degree in fiber science allows those students to focus more on physical science and materials. Curricula in all three areas have been updated to incorporate contemporary career skills and updated course offerings. Learn more.

Jirousek Books Collection at Mann Library
The family of Professor Charlotte Jirousek has donated over 200 volumes of her fashion, costume, and textile books, to the Cornell Library. Mann Library displayed portions of the collection in the Fall semester. Read more.