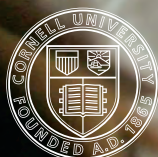


# Human ECOLOGY

College of Human Ecology, Cornell University • Volume 40, Number 2 • Fall 2012

## Keeping Teens on Track

Human development professors  
Anthony Burrow and Jane Mendle  
examine the challenges of growing up  
*page 10*



Cornell University



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Cornell's College of Human Ecology publishes  
this magazine to illustrate how its programs  
address complex societal issues to improve the  
human condition. This mission of human improve-  
ment is accomplished through faculty initiatives  
in research, outreach, and teaching—with an  
emphasis on an ecological perspective, collabora-  
tive projects, and multidisciplinary curricula within  
and across five academic units: the Department of  
Design and Environmental Analysis; the Department  
of Fiber Science & Apparel Design; the Department  
of Human Development; the Department of Policy  
Analysis and Management; and the Division of  
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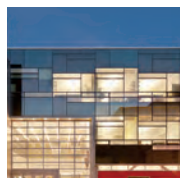
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# What's

*Christina Lantuh '15 (left) and  
Arin Grant '13 participate in the  
college's Peer Partnership  
Program to help freshmen and  
transfer students adjust to  
college life.*

*ON THE COVER: Classes  
change at a crowded  
New Jersey high school. AP  
Images*

## InShort 2



## Fashion Sense

Apparel design faculty teach  
students fashion with eyes on  
the global garment-making  
network and the diverse cultural  
influences driving modern styles.

4



## New Studies Offer Clearer Picture of Human Sexuality

9

## Cover Story Growing Pains

As teens and young adults  
struggle to come of age,  
interventions and findings by  
human development researchers  
could help ease the transition.

10

## The Juggling Act

Human Ecology faculty explore  
challenges working mothers face  
to balance careers and families.

14



Fulfilling the college mission to advance and improve the human experience has always required a mix of viewpoints and approaches that reflect the needs of entire communities. In this issue of *Human Ecology*, you will discover some of the research currently underway at the college that demonstrates the broad range of diverse topics and populations that our work touches on and impacts.

True to our multidisciplinary approach, faculty, staff, and students engage in research and outreach projects in a mix of disciplines aimed to untangle some of the most complex societal problems and to deepen our understanding of our diverse world. From the diverging fortunes of low- and high-income working mothers to the challenges facing teens and young adults navigating a complex world to the diverse cultural influences that shape the global fashion industry, our work is aimed at serving a great variety of populations and studying key issues from many different angles.

While this issue of the magazine reflects a commitment to the mix of backgrounds and viewpoints that drive our research, I am struck by the same level of diversity reflected in our work described in previous issues of the magazine. That fact reminds me of how well aligned our college is with the core principles that underlie the new university approach to diversity, "Toward New Destinations," which is explained in the Afterword on the inside back cover. For that reason, I am encouraged by our potential to continue to show leadership at Cornell in these areas through the research, teaching, and outreach that underpins our mission.

Alan D. Mathios, Rebecca Q. and James C. Morgan Dean  
The College of Human Ecology

# inside.

### Planting the Seeds of Good Health, Education

19

### Researchers Examine Programs to Help Military Families

27

### Afterword

Moving Toward New Destinations

29

### What I Did Last Summer

Students perform research and outreach in campus labs and communities around the state.

20

### Six New Scholars Join the College Faculty

28

### Human Ecology Mentors Offer Lifelines to New Students

26





# In Short



## Mathios to serve second term as dean

The Cornell Board of Trustees Executive Committee voted Sept. 6 to approve the appointment of Alan Mathios, the Rebecca Q. and James C.

Morgan Dean of the

College of Human Ecology, to a second five-year term, beginning July 1, 2013. Under Mathios's leadership, the college has expanded research and teaching collaborations between the Ithaca and Weill Cornell Medical College campuses, launched a dual Ph.D.-J.D. program in developmental psychology and law, established the Bronfenbrenner Center for Translational Research, and grown the Cornell Population Center. Mathios has also overseen major facilities projects, such as the new Human Ecology Building and the Cornell MRI Facility in the newly renovated Martha Van Rensselaer Hall. "It is an honor to be able to serve another term as dean," Mathios said. "I look forward to nurturing existing cross-college collaborations and building new ones, further integrating our undergraduate curricula with our research and outreach missions, and building on our strengths in each of our units through strategic faculty renewal."

## Study: Negative stereotypes about poor hurt their health

Adolescents who grow up poor are more likely to report being treated unfairly, and this perception of discrimination is related to harmful changes in physical health, reports a study by Gary Evans, professor of human development and of design and environmental analysis, and Anthony Ong, assistant professor of human development. The findings, published in *Psychological Science*, are among the first to explore discrimination as a factor in the well-known link between poverty and poor health, suggesting that the stresses associated with experiencing social class discrimination have a sizable negative impact. "That discrimination may be capable of elevating chronic physiological stress in relatively healthy, young adults is potentially a very important finding," said Evans.



## Fluke discusses social activism, women's and health care issues during campus visit

Sandra Fluke '03, who became famous last spring when conservative talk radio hosts disparaged her for attempting to speak to a Congressional panel about religious exceptions to health care plans with contraception mandates, visited campus Oct. 15 to speak about women's rights, the political and media landscape, and her time in the national spotlight. Fluke, a policy analysis and management graduate who went on to Georgetown Law School, encouraged students to research and speak out about the issues they care passionately about. For policy-minded students like her, she argued that citizen activism is an important way to apply classroom knowledge and skills to create legislative change.

Paul Warchol



## Human Ecology Building earns LEED Platinum rating

The U.S. Green Building Council in September certified the Human Ecology Building as LEED (Leadership in Energy and Environmental Design) Platinum—its highest rating for sustainable structures—making it the first building to achieve the distinction on the Cornell campus.

Opened in August 2011, the 89,000-square-foot building earned 53 out of 69 possible LEED credits, earning high marks for being developed on a sustainable site, limiting energy use and emissions, and

ensuring indoor environmental quality. Most notable of the building's green features is an extensive real-time energy usage monitoring system, allowing occupants to reduce their environmental impact and researchers and students to get a window into the building's efficiency. "Achieving LEED Platinum is especially satisfying given that sustainability is a key part of our research, teaching, and outreach mission," said Dean Alan Mathios.

## New partnership promotes healthy living among youth

On Aug. 29 at the New York State Fair, New York 4-H—managed by Cornell Cooperative Extension and the college's Bronfenbrenner Center for Translational Research—kicked off Eat4-Health, a youth program to promote healthy living and to help combat the nation's obesity epidemic. Funded by a \$30,000 grant from health insurer UnitedHealthcare, the program will empower 4-H youth in four New York counties to make healthy choices for themselves and to encourage others in their communities to make positive changes. The program, which extends to nine other states, is based on curricula developed jointly by New York 4-H and Cornell's Division of Nutritional Sciences.

Steve Parker



## New infrastructure policy program launches with NYC panel

America's roads, utilities, and other infrastructure assets are aging, with few viable solutions in reach due to partisan gridlock in Congress, strained municipal budgets, and growing demand for services. To address the crisis, Rick Geddes, associate professor of policy analysis and management, formed the Cornell Program in Infrastructure Policy (CPIP), which formally launched Sept. 19 in New York City with a panel discussion by experts from education and industry. Speakers included John Foote, Cornell visiting lecturer in city and regional planning and co-founder of an automated toll collection system; Germa Bel, an expert on high-speed rail; and Mark Joseph, CEO of Veolia Transportation. CPIP aims to develop public policies to improve the delivery, maintenance, and operation of U.S. infrastructure through teaching, research, and outreach.

Claire Lambrecht



## Dietetics undergrad earns national award from food service association

Courtney Gullett, a junior in the undergraduate Didactic Program in Dietetics in the Division of Nutritional Sciences, is one of four winners nationwide of the 2012 Clark E. DeHaven Scholarship from the National Association of College and University Food Services. The \$5,000 award, established in 1990, is given to top students training for food service careers or related areas. Gullett, president of the Cornell University Dietetic Association, plans to become a registered dietitian and then work in food product development or a college dining setting. She said she is attracted to nutrition and dietetics by a desire to "make food that tastes amazing but is healthy as well," adding, "I think [writing] a cookbook will definitely be on my horizon."



## Astonishing designs debut at student fiber arts exhibit

A jacket made from a mushroom-based fabric, an ethereal tribal gown and headpiece affixed with a 12-foot wingspan, a beaded dress draped with hand-crafted steel and aluminum chain mail—such fanciful student creations stood out at the Barbara L. Kuhlman Foundation's Fiber Arts and Wearable Arts Exhibition, from Sept. 10 to Nov. 15 in the Human Ecology Building. The show, in its seventh year, featured original designs by seven Fiber Science & Apparel Design (FSAD) students, who spent a year researching, sketching, and fabricating their pieces. Each year, the

Kuhlman Foundation, a nonprofit dedicated to fiber and wearable arts, awards scholarships to students to pursue their artistic visions under the direction of FSAD associate professor Van Dyk Lewis and senior lecturer Anita Racine.

## Students hold free health fair for Brooklyn families

Last summer, undergraduates in the Iscol Family Program for Leadership Development in Public Service and the Urban Semester Program boosted the health of Brooklyn families at a free wellness fair that included health screenings, cooking demonstrations, tips on managing chronic disease, and exercises and healthy snacks for kids. Four Iscol pre-med students, participating in public service summer internships through the Urban Semester program in New York City, worked with community partners to organize the health fair at Nuestros Niños Day Care Center. The students were able to screen more than 70 community members for levels of blood glucose, cholesterol, and blood pressure.



# Fashion Sense

BY SHERI HALL

From the world's fashion capital of New York City to the streets of small-town America, the range of clothes we wear reflects our diverse personal tastes and the environments we live in. But our sense of fashion also draws on international influences, such as the diffusion of different cultures into mainstream styles and the global network for designing and creating apparel.

Globalization influences the fashion industry on every level: Stores of all types, from exclusive boutiques to superstores like Target, carry apparel by designers from a variety of backgrounds; American designers are influenced by symbols and traditions from other cultures; and the vast majority of our clothing is manufactured abroad.

Learning to understand and respect the global nature of the fashion industry is an essential component of the apparel design program in the Department of Fiber Science & Apparel Design in the College of Human Ecology. Faculty members conduct research on these issues and bring their findings into the classroom, equipping students to work in the global marketplace. That means learning about the entire process of making clothing—from sourcing materials to manufacturing, marketing, and selling garments—as well as understanding the cultural traditions underpinning specific design aesthetics.

Apparel design professors also convey their own perspectives about diversity and globalization, teaching students to think critically about the meaning of multiculturalism in fashion.

“This is a global economy,” explained Charlotte Jirousek, associate professor of apparel design. “There are connections in everything—in food, in technology, and, of course, in fashion. For our students, it’s important they come to understand the entire path, from a designer working on a mood board to actually dyeing the textiles and sewing them up.” > > >

*On a 2012 trip to India, FSAD students observed workers at the Bharani Fabrics cheese dyeing unit in Perundurai, an area known for its excellence in fabric production.*









FSAD assistant professor Tasha Lewis lectures to students about traditional Indian garments becoming popular in mainstream fashion.

## Grasping fashion's global history

In classes, apparel students learn about the history of supply chains and textile arts across the globe to understand the complex nature of the modern fashion industry.



FSAD professor Charlotte Jirousek examines a traditional Romanian wedding dress from the Cornell Costume and Textile Collection, a resource for teaching about historical and contemporary dress.

Jirousek, in particular, studies interactions between eastern and western cultures in fashion design and dress, particularly Turkey's place in the history of textile design and trade. Her research has documented many traditional Turkish textile techniques—rapidly disappearing due to industrialization—and has sought to preserve their place in history.

Early in her career, Jirousek came to appreciate the eastern textile tradition and the impact of the Ottoman Empire on the history of fashion, after spending several years in Turkey with the Peace Corps.

"There's been a tendency to ignore that part of the world even though it was a center of trade and culture," she said. "The more I learned about that history, the more shocked I was about how absolutely blind we were to anything that happened outside of the West."

Jirousek teaches about the history and language of design beyond European and American borders in several of her classes, including an introductory class for undergraduates, "Art Design and Visual Thinking," and two graduate-level classes: "Aesthetics and Meaning in World Dress" and "The History of Color, Design, and Textiles."

She also curates the Cornell Costume and Textile Collection, a library of more than 9,000 items of apparel dating from the 18th century to the present, as well as a substantial collection of ethnographic textiles and costumes. The collection allows students to view samples of apparel and textiles from across history and around the world.

Human Ecology students regularly incorporate non-western viewpoints and aesthetics into their work. Case in point: Matilda Ceesay, a senior apparel design major, created a line for the 2012 Cornell Fashion Collective runway show based on cultural traditions of her homeland, Gambia. Ceesay imagined her collection as a blend of traditional African style with more modern western trends. She called it "Njehring," which means "worth" in the language of the Wolof people of West Africa. "When creating my



silhouettes, the object was to create a collection that was distinctly African,” Ceesay told the online magazine *designboom*.

Apparel design students also have the opportunity to witness the global nature of the fashion industry firsthand. Students can participate in a course that culminates in a two-week trip to India, where they learn about the global manufacturing process by visiting everything from cotton fields to small handloom shops to state-of-the-art factories. “The whole array is possible, and they see the reality of it all,” Jirousek said.

Assistant professor Tasha Lewis, who joined the FSAD department last winter, teaches about the global economics of fashion. She’s studied, for instance, how small-scale fashion designers and businesses operate under the North American Free Trade Agreement and how designers in Mexico and Panama reference traditional cultural elements in their work.

“A lot of countries have contemporary designers and markets where people are trying to export their cultural identity,” she said. “It’s a way to promote manufacturing in their countries, but also to create something unique and develop their national economy.”



FSAD student Matilda Ceesay’s collection for the 2012 Cornell Fashion Collective runway show (on model) offered a bold take on conventional African garments.

Her research, published in the *Journal of Fashion Marketing and Management*, involved a case study of two apparel businesses in Mexico. Based on the results, she developed guidelines to help small business owners and communities promote development through apparel production and export under NAFTA.

**“This is a global economy. There are connections in everything—in food, in technology, and, of course, in fashion. For our students, it’s important they come to understand the entire path, from a designer working on a mood board to actually dyeing the textiles and sewing them up.”**

**—Charlotte Jirousek**

### **Fusing culture and fashion**

When a fashion trend spreads widely or becomes popular, it is called “diffusion.” When a trend moves from one culture to another, it is called “appropriation.” Both happen regularly in the fashion world, and understanding these phenomena are an essential part of the curriculum for apparel design students.

“The factor of ‘cool’ often starts in a subculture,” explained Lewis, who is studying the evolution of fashion in hip hop culture. “It’s important for our students to understand how the process of diffusion happens, so that when they see something in a store window at the mall, they understand where it comes from.”

She recently completed an article in press with the journal *Fashion Practice* about the influence of hip hop culture on mainstream fashion—specifically how Russell Simmons, co-founder of Def Jam records, created and marketed the fashion line Phat Farm.

“Early on, hip hop fashion did not have its own aesthetic,” she explained. “It was very much driven by luxury American brands, and then adapted by African-American and Latino consumers. Fans imitated what the musicians wore. Then a new wave of musicians developed their own fashion lines.”

Today, Simmons’s latest fashion line, Argyleculture, is displayed in Macy’s next to iconic American brands such as Ralph Lauren and Tommy Hilfiger. “Now hip hop brands have a larger, diverse group of consumers,” Lewis said. In her interview with Simmons, he explained the impact of hip hop culture in the context of a post-racial America, where hip hop music has a more global appeal and the fashion has followed along the same lines.

Giving students the tools to understand these types of multicultural dynamics in fashion and teaching them to think critically about all aspects of their work is a hallmark of the integrated learning experience at the College of Human Ecology.

“We teach our students about the process of diffusion and cultural appropriation so they can consider what it means in their own work,” Lewis said. “It is important because subcultures influence so much of what we do. We teach them to consider all of the aspects of culture in their work.”

• • •

### **For more information:**

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Images from the college's 3D body scanner.

## Clothing for all shapes and sizes

### 3D body scanning is transforming the apparel industry.

Short, tall, slender, plump, or somewhere in between, human bodies come in an endless variety. But the standard practice in the fashion world is to mass produce garments based on a limited number of model sizes and shapes, leaving about half of men and women struggling to find clothes with the proper fit.

Thankfully, an improved fitting process is on the horizon, based on techniques being developed with three-dimensional body scanners like the one in the Department of Fiber Science & Apparel Design (FSAD). The technology, which can capture roughly 300,000 digital data points in a 12-second full-body scan to create a personalized virtual avatar with detailed body measurements, provides a tool that can enable a shift from mass production to customized clothing tailored to the individual.

"There's a huge variation in our bodies' sizes, shapes, and proportions—even the way we hold ourselves," said Susan Ashdown, the Helen G. Canoyer professor in FSAD and director of the Cornell Body Scan Research Group. "We often think about diversity in terms of culture, but variation among people goes much deeper than that."

Already, apparel manufacturers are using body scanning technology to create shape and size profiles of people in their target markets, then adjusting the garments to better fit that segment of the population, according to Ashdown. One company, for example, is using body scanner data to make dress forms that are more realistic that can be modeled to match a company's target market. Cornell students have used the 3D body scanner in collaborations with industry partners to compare the effectiveness of different sizing systems, test automated pattern-making systems designed to make custom clothing, and measure the effectiveness of virtual avatars for assessing fit.

"When assessing fit, if you have two types of clothing that are nominally the same measurements, one may just feel better on your body and look better, while another one will not quite feel right or look right on your body," she said. "We're not simply measuring waist or height. We are looking at the variety of angles in the human body and trying to categorize them and relate clothing to them in complex ways."

The new technology also makes a strong impression on undergraduates in the college's fashion design program, who gain an appreciation for the diversity of human body types and learn what it takes to create well-fitting garments. As these students climb the industry ladder, they are in a position to

design clothing that looks good on a variety of body proportions and to learn how to identify and provide clothing for those who are not being served well by current industry practices.

"Our students are going to be the next leaders in the fashion industry, and they need to understand the range of body types that they're going to be fitting," Ashdown said. "A successful designer of ready-to-wear clothing is creating a garment that looks wonderful on a specific group of people, some segment of the population that they understand very well. This technology allows our students to learn what that means and how complex it is."

Body scanning also has the potential to improve sustainability in the apparel industry by creating better-fitting, longer-lasting garments, Ashdown said.

"If you dig through your closet, you'll find there are clothes you wear quite a lot, most likely because they fit you extremely well, and those that you don't wear much at all because they don't fit as well," she said. "Often, if something doesn't fit quite right, we just go out and buy something new."

Ultimately, Ashdown said, well-designed apparel is about the interaction between the garment and the human body.

"Clothing is the item in our life that is the closest to our bodies, and we have to understand our bodies to clothe them," she said.

### Related information

Cornell 3D Body Scanner  
[www.bodyscan.human.cornell.edu](http://www.bodyscan.human.cornell.edu)



Susan Ashdown



# New Studies Offer Clearer Picture of **Human Sexuality**

A trio of recent studies by Cornell's Sex & Gender Laboratory, directed by Ritch Savin-Williams, professor of human development, shed new light on sexual orientation and its repercussions on a person's physical, mental, and social health.

The first, published last winter in *Archives of Sexual Behavior*, determined that human sexual orientation is best represented as a continuum that has two new categories—"mostly heterosexual" and "mostly gay/lesbian"—along with heterosexual, bisexual, or gay/lesbian.

The findings suggest that sexual orientation is not just a one-dimensional continuum with preference for the opposite sex on one end and for the same sex on the other. Rather, it is more likely two continuums—one for depicting a person's orientation to the same sex and the other for the opposite sex, argue Savin-Williams and lead author Zhana Vrangalova, human development graduate student.

"In other words, having more same-sex sexuality does not necessarily mean having less opposite-sex sexuality," Savin-Williams said.

The authors analyzed 1,676 responses to their online sexuality survey of adults. Twenty percent of women and 9 percent of men identified themselves as "mostly heterosexual," lending evidence for a more nuanced 5-point scale for depicting sexual orientation.

They argue that more accurate "in-between" labels for sexuality will help investigators to better understand health challenges unique to people of differing sexual orientations.

More recently, Savin-Williams and human development postdoctoral associate Gerulf Rieger discovered that pupil dilation is an accurate indicator of one's sexual attraction—the first scientific evidence of this phenomenon.

The researchers used a specialized infrared lens to measure pupillary changes as study participants watched erotic videos. Pupils were found to widen most when a person watched erotic videos of someone they found attractive, revealing where they were on the sexual spectrum from heterosexual to homosexual. Previous research explored these mechanisms either by simply asking people about their sexuality or by using such invasive physiological measures as assessing their genital arousal.

"With this new technology, we are able to explore sexual orientation of people who would never participate in a study on genital arousal, such as people from traditional cultures," said Rieger of the findings, published in August in *PloS ONE*. "This will give us a much better understanding of how sexuality is expressed across the planet."

In a third study, also by Savin-Williams and Rieger, researchers uncovered an

overlooked contributor to poor mental health in teens.

Regardless of their sexual orientation, they found in a study published in *Archives of Sexual Behavior*, teens who do not fit behavioral norms for their gender are not as happy as their gender-conforming peers. Thus, it may be the effects of not conforming to gender stereotypes, rather than sexual orientation, that drive the increased mental health risks found among nonheterosexual youth.

"We need to rethink how sexual orientation relates to health—too much emphasis has been put on a nonheterosexual orientation itself being detrimental," Rieger said.

For their research, Rieger and Savin-Williams analyzed data from 475 rural high school students who participated in a survey about their sexual orientation, preference for male-typical or female-typical activities, and psychological well-being.

The researchers found that the nonheterosexual youth in the study were more likely to violate gender norms for behavior, feelings, activities, and interests, but so did some heterosexual youth. The effect of being a feminine boy or a masculine girl was similar regardless of sexual orientation—both childhood and adolescent gender nonconformity were negatively linked to well-being. The effects on mental health, however, were small, which the researchers say may explain why most same-sex-oriented individuals experience few mental health problems.

"Perhaps some adolescents are harassed not so much because they are gay," said Savin-Williams, "but because they violate 'acceptable' ways of acting. If so, sexism may be a more pervasive problem among youth than homophobia."

*Karene Booker, extension support specialist in the Department of Human Development, contributed reporting to this piece.*



Ritch Savin-Williams



# Growing Pains

BY TED BOSCIA

Growing up is hard to do, perhaps now more than ever. To start, kids, especially girls, appear to be maturing sooner—a 2008 paper in *Pediatrics* pointed to evidence that girls are entering puberty earlier now than in the mid-20th century. Among boys and girls, early bloomers are at greater risk for such behavioral problems as eating disorders and depression and other health concerns that may not fully surface until adulthood. “We all go through it, but puberty is a huge period of risk and vulnerability—for some more than others,” said Jane Mendle, assistant professor of human development who studies how and why some kids manage puberty easier than others.

And though children arrive in adolescence earlier these days, they take longer to depart. Gone are the days when 18-year-olds graduated from high school and left home for good; now parents worry that so-called “boomerang kids” will be back living under their roof. Increasing numbers of young people are delaying marriage and parenthood and are slow to settle into careers during this prolonged period that some youth development researchers describe as “emerging adulthood.” For many, it takes until their late 20s or early 30s to become fully independent, and the current stalled economy isn’t helping. It’s little wonder that a 2012 Clark University poll of emerging adults found that more than half report frequent anxiety and two-thirds say “this time of my life is full of uncertainty.”

No doubt, puberty and young adulthood have for centuries been stormy developmental periods, but the present seems to be an especially challenging time in history to come of age. “Young people are faced with an increasingly complex society,” said Anthony Burrow, assistant professor of human development who studies how youth develop their identity and purpose. “There’s been an explosion of possibilities due to industrialization and technology, but along with those opportunities are more hazards to get them off track.”

Because of this greater complexity, teens and young adults—whose brains are still developing in fundamental ways, neuroscience research shows—may be faced with > > >

*Human development assistant professors Anthony Burrow and Jane Mendle study how to keep teens and young adults on the right track so they can thrive in adulthood.*





situations they are emotionally and intellectually unprepared to handle. In schools, for instance, there's been a rapid increase in "the sheer volume of information, knowledge, and skills regarded as basic," noted Janis Whitlock, research scientist in the Bronfenbrenner Center for Translational Research (BCTR) and director of the Cornell Research Program on Self-Injurious Behavior in Adolescents and Young Adults.

"More opportunities is great, but as options increase so does the time required to explore them all and so does the complexity involved in narrowing down what works and fits with everything else emerging in life," Whitlock added. "The resulting maturity gap—distance in time and development between childhood and readiness for adult roles—has widened considerably."

Burrow and Mendle, two of the newest faculty members in the Department of Human Development, are doing basic research and designing interventions to help youth better deal with the demands of growing up in this complicated environment. Their findings are painting a clearer picture of the developmental needs of kids as they grow into adolescence and then adulthood and could help make the difference between kids thriving or failing as adults.

"What we share are core interests in transitions and how they can hold more resonance or present more of a stumbling block for some kids or others," Mendle said. "Tony [Burrow] is most interested in what we can do to mitigate the negative effects of these transitions; whereas I'm interested in what it is about these transitions that makes them so important. The main overlap is that we both want to be able to help young people with navigating the storm and stress of growing up."

### Timing and tempo of puberty

What makes puberty so intriguing to Mendle, a trained clinical psychologist focused on adolescent psychopathology, is that it's a universal human experience, a milestone developmental process that kicks off adolescence. Yet differences in how kids go about it—puberty's timing, pace, one's family environment and genes—can shape who people become well into adulthood. And because puberty is a biological process that occurs in various social contexts—among friends, siblings, parents, teachers, and others—teens struggle to comprehend not only the dramatic physical changes to their bodies, but similar sudden shifts in how others relate to them.

"Puberty is nobody's idea of a great time, but some kids are able to navigate it successfully and resiliently and others run into more difficulty," said Mendle, previously an assistant professor at the University of Oregon. "I'm interested in figuring out why."

For insights, Mendle has looked to early childhood. She and others have found that early-life difficulties—specific trauma such as abuse or maltreatment or broader stressors such as poverty—can affect how and when kids go through puberty. In a study published in 2011 in the *Journal of Research on Adolescence*, Mendle and co-authors looked at girls in foster care, finding links between maltreatment early in life and early onset of puberty and a more accelerated pace of physical maturation. The findings suggest that the timing and tempo of puberty are malleable based on early life experiences, with distress at a young age often a key trigger of early puberty.

**"Young people are faced with an increasingly complex society. There's been an explosion of possibilities due to industrialization and technology, but along with those opportunities are more hazards to get them off track."**

**—Anthony Burrow**

The timing and pace of puberty are critical because studies have shown early bloomers and rapid growers—those who complete puberty in a year or so—face heightened risks for a host of behavioral problems. Mendle and a group of co-researchers are the first to study how puberty tempo affects boys. In findings published last year in *Developmental Psychology*, they report that boys who speed through puberty struggle to get along with others their age and are more prone to depression. "In [such cases], boys may progress through puberty at a rate that is faster than the social environment can feasibly respond," Mendle said.

Still, girls appear most at risk for developing psychological problems during puberty. Prior to puberty, for instance, boys and girls on average show similar rates of depression, anxiety, and eating disorders. But once their bodies begin changing, girls are twice as likely to become depressed, twice as likely to experience an anxiety disorder, and ten times as likely to develop an eating disorder, according to Mendle.

One of Mendle's first intervention studies will be aimed at helping girls to adjust to changes associated with puberty. Next year, she hopes to adapt a focused writing exercise that's been proven to produce positive emotional benefits and behavioral changes for people in mourning or laid off from work, for instance, with girls. "Many girls write in journals, but this is a very structured writing process that's been shown to be particularly good for people going through times of change," she said.

Mendle is optimistic that the writing program will help the group, though she considers herself "more of a theorist than interventionist."

### A sense of purpose in life

Burrow has placed writing interventions at the center of many of his studies. Most recently an assistant professor at Loyola University in Chicago, Burrow defines his research on two distinct tracks: how youth, particularly racial minorities, identify themselves and what role purpose in life plays in their everyday experiences. Both, he contends, hold promise as powerful inner resources to help adolescents withstand the trials of growing up.

"It may be that cultivating one's identity and sense of purpose are survival tools to help young people navigate the challenges of our complex modern society," Burrow said. "Knowing who you are and how you label yourself and knowing what you'd like to do going forward can be protective factors that help people overcome everyday stressors."

So far, Burrow's research is confirming these theories. In a novel study on the power of purpose, yet to be published, Burrow's Loyola research team observed research

participants on Chicago train cars. They found that people's negative moods increased the more the racial makeup of the surrounding passengers differed from their own ethnicity—confirming past research that people tend to feel uncomfortable in diverse crowds. Remarkably, people who had reported having a defined sense of purpose showed significantly less fear and anxiety. In a related experiment, briefly writing about purpose prior to boarding trains produced a similar calming effect.

“A common definition of purpose is pursuing life aims that are meaningful to you but also to the world beyond yourself,” Burrow said. “Thinking about your future life direction may help you deal with everyday stressors by being reminders that you are pursuing something greater than the stressful situation before you and that you are connected to others around you.”

Even establishing that youth are capable of considering their purpose is relatively new ground for the field, challenging the presumption that only adults could grapple with such profound matters. “We’ve asked young people in high schools to define purpose. Not only do they answer these questions, but do so in ways very similar to adults,” Burrow said.

In a new study funded by the Bronfenbrenner Center for Translational Research, Burrow and Whitlock plan to test two 10-minute writing interventions with 150 high school seniors that are intended to make them ponder their life’s purpose and meaning. Both concepts are connected to positive psychological adjustment across the lifespan, but Burrow and Whitlock hope to pinpoint specific ways purpose and meaning help youth in the near and long term.

Whitlock and Burrow think purpose may be a key contributor to young people’s resiliency—what psychologists characterize as a person’s ability to cope with emotional and mental hardships. In a similar way, Burrow has discovered that identity figures into how well individuals, particularly ethnic minorities, endure such stressors as racial bias. While overt discrimination in housing, hiring, or other areas may not be as common nowadays due to legal protections, many people of color face subtle indignities, what researchers term “racial micro-aggressions.” These could be offensive jokes, derogatory language, or events that, in their eyes, appear to be motivated by racial bias. As with purpose, a strong sense of one’s identity tends to play an important part in buffering minorities from such affronts, Burrow found.

Since coming to Cornell, Burrow and Mendle have not collaborated on research, though they see common threads in their work. For one, it could be that identity and purpose can also help adolescents get by the turmoil of puberty.

“The evidence is pointing to a sense of purpose and identity as helping youth to negotiate a range of challenging tasks, perhaps even puberty,” Burrow said. “At a time when young people are figuring things out and have a lot of possible paths before them, hopefully we can help cultivate these key assets to keep them on the right track.” • • •

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Human development professor Valerie Reyna (second from right) leads a meeting of her research laboratory.

## Extension project guides teens to make wiser decisions about sex, diet, and exercise

The common stereotype of teens is that they speed through red lights, binge drink, or have unprotected sex because they are thrill seekers blind to risk.

Not true, finds Valerie Reyna, professor of human development, whose research shows that adolescents are aware of the potential dangers of their actions, but make calculated choices to “play the odds” because they believe “it’s worth the risk” for the perceived rewards.

Reyna’s studies have revealed that adolescents tend to reason and assess risk via “verbatim-based analysis”—where the mind focuses on precise details and facts and runs a complex comparison of the costs and benefits of a decision. Adults, on the other hand, more often use “gist-based intuition” to immediately understand the bottom-line dangers inherent in an action. Teen drivers may be inclined to race to beat a train, knowing there’s a high probability they’ll make it; adults would automatically sense that’s a bad idea, realizing the small chance it could be deadly.

To help vulnerable teens make smarter choices about sexual activity, nutrition, and fitness, Reyna and Cornell Cooperative Extension partners are applying her research in a new extension-funded risk reduction project. Working with 189 youth ages 14–19 in Broome County, Ithaca, Queens, Harlem, Brooklyn, and the Bronx, extension educators are teaching a gist-enhanced version of the Reducing the Risk curriculum identified as effective by the Centers for Disease Control.

Reyna developed two interventions—one to reduce risk of sexually transmitted diseases and teenage pregnancy and another to promote healthy eating and physical activity—that teach teens how to apply gist thinking when temptation strikes. Through 14 one-hour lessons, students learn to quickly and automatically recognize hazardous situations and how to reflexively recall and apply their core values to sidestep such dangers.

The stakes, she said, are incredibly high when it comes to risky decision-making by teens. A wrong choice could lead to death or destroyed potential. “But teens are not fated to negative outcomes from risky behaviors,” Reyna said. “We can give them strategies to avoid risk and turn around their life trajectories.”





# The Juggling Act

BY SHERRIE NEGREA

Over the last four decades, the proportion of working mothers with children ages 18 and younger at home in the United States has skyrocketed from 47 percent in the mid-1970s to 71 percent last year, according to the U.S. Bureau of Labor Statistics. More mothers are working full-time, year-round than ever before.

Yet the progress of integrating mothers into the labor force has not come without challenges. Although a growing number of fathers opt to stay at home part- or full-time with children, in the United States prevailing gender norms still suggest that women, employed or not, are primarily responsible for child-rearing. (Indeed, a 2011 Census Bureau report on child care in America assumed the mother to be the “designated parent” in households headed by two parents.) And working-class women, in particular, spend a greater proportion of their income on child care and face trouble juggling career and family because of unstable work environments.

Researchers across the College of Human Ecology—social scientists, developmental psychologists, economists, demographers, and nutrition experts—are studying these broad trends to help paint a clearer picture of the demands facing working mothers. Their investigations raise important questions about how to reshape governmental policies and social structures to provide more stability for mothers trying to manage the work-family balance.

In the Department of Policy Analysis and Management, a common thread is the diverging fortunes between middle- and upper-income and working-class mothers. The most highly educated mothers, for example, are more likely to return and remain in the workforce after the birth of a child than are less-educated mothers. > > >





Sharon Sassler



John Cawley



Lorraine Maxwell



Rachel Dunifon

“The reality is that professional women are more likely to be in the labor force,” said Sharon Sassler, professor of policy analysis and management who studies family dynamics. “In part, that’s because the workforce wants to accommodate them. They’re highly skilled, and they’re harder to replace.” The percentage of women in the workforce who have a college degree has more than tripled in the past 40 years.

**Dunifon and her co-authors find that children of mothers who work the night shift—between 11 p.m. and 7 a.m.—exhibit higher levels of aggressive behavior than children of mothers who work other schedules.**

By contrast, working mothers in lower-skilled jobs, such as those employed in the 24/7 service economy, often churn in and out of the labor force or have irregular schedules that make it difficult to meet their families’ needs. For instance, their job instability and fluctuating schedules are associated with higher levels of behavioral and school-related problems in their children, finds Rachel Dunifon, associate professor of policy analysis and management.

The working patterns of highly educated women are markedly different from those of less educated women, creating a growing divide among employed mothers, Sassler’s research shows. In a 2010 paper, for example, Sassler and her co-authors report that among women who gave birth to their first child between 2001 and 2003, 82 percent of college-educated women were working during their pregnancies, compared to less than a third of those who did not graduate from high school.

Sassler has recently shifted her research to the lack of women working in STEM (Science, Technology, Engineering, and Math) fields. In a recent study based on a nationally representative sample of men and women, nearly 90 percent of whom had obtained their college degree by 1990, Sassler and her co-researchers find that the dearth of women in STEM fields is related to the work climate they face in these

positions, since women are less likely than men to enter into these fields when they have identical experience and expectations about their careers.

Even when they do work in STEM positions, half of such women leave for other fields within 12 years of completing their degrees, they found. Motherhood, a common culprit, does not appear to be to blame for the shortage, Sassler argues, finding that “women in STEM positions are no more likely to leave the labor force when they have children.” Sassler, who in recent years has received funding from the National Science Foundation and the National Institutes of Health to study the matter, suggests that a better understanding of the work climate STEM women face and the factors that prompt them to leave the field could help retain them.

The underrepresentation of women in STEM positions, particularly in academia, is also the focus of the Cornell Institute for Women and Science (CIWS), founded by Wendy M. Williams, a professor of human development, and Stephen J. Ceci, the Helen L. Carr Professor of Developmental Psychology. Williams and Ceci argue that the lack of women in academic positions in engineering, physics, and mathematics departments results from women opting not to apply for tenure-track jobs because of the incompatibility of research professorships with raising children. CIWS is attempting to combat this trend by informing university administrators, professors, and others about the challenges women face in STEM positions and recommending policy changes for the academy (see sidebar on page 18).

At the other end of the spectrum, working mothers employed in low-wage jobs face drastically different parenting challenges that relate to the conditions of their work, according to Dunifon. In a 2010 book, *Mother’s Work and Children’s Lives: Low-Income Families after Welfare Reform*, Dunifon and her co-authors report that for some less-advantaged mothers, work can bring stability but others face long commutes, nonstandard hours, low-wage jobs, and menial labor.

“The conditions of jobs common in the low-wage market do pose difficulties for mothers,” Dunifon said. “Service-sector jobs often have schedules that change day to day, making it difficult for mothers to arrange child care, plan meals together, or enact other important family routines. These jobs also have high levels of turnover.”



Kathleen Rasmussen

Using a sample of predominately single Michigan mothers who left welfare beginning in the late 1990s, Dunifon finds that children fare better when their mothers are employed in stable jobs. Most of the women in the five-year study, however, held jobs that lasted only for an average of seven months.

Besides job instability, Dunifon's research identifies two factors in low-wage employment that are associated with behavioral problems in children:

working the night shift and commuting long distances. In a recent study, Dunifon and her co-authors find that children of mothers who work the night shift—between 11 p.m. and 7 a.m.—exhibit higher levels of aggressive behavior than children of mothers who work other schedules. Similarly, children of mothers who commute long distances, defined as an average of 80 minutes per day, had more behavior problems, including aggression, withdrawal, and depression.

To reverse these trends, Dunifon argues that employers, especially those in the service sector, should strive to offer more stable schedules and that more funding be allocated for education and training programs. "Investing in improving the skills of single mothers would not only help the moms but also the kids," she said.

## Working moms struggle with children's nutrition

As new mothers re-enter the workforce, one of the first challenges they face is how to continue breastfeeding their infants. The American Academy of Pediatrics recommends that mothers breastfeed their children for at least 12 months. But in the United States, 23 percent of infants born in 2006 were breastfeeding at 1 year of age, according to the Centers for Disease Control and Prevention.

Yet over the last decade, according to Kathleen Rasmussen, professor of nutritional sciences, a "quiet revolution" has been taking place in the feeding of U.S. infants as more women have been using electric double-breast pumps, developed by Medela, a Swiss company, that are more effective and more affordable than previous models. "Having a pump like this available allows you to pump your milk in sufficient quantities so you can store enough milk to breastfeed your baby longer in life," Rasmussen said.

When breastfeeding mothers return to work, they must find suitable places to express their milk. In 2008, Cornell's Department of Inclusion and Workforce Diversity asked Lorraine Maxwell, associate professor of design and environmental analysis, if her "Programming Methods in Design" class could create recommendations for developing lactation rooms on campus. Among the suggestions made by the class were that the lactation rooms be places where the women felt comfortable, such as a space that is part of a restroom suite, and that the space be secure and private.

"Cornell had already identified the need," Maxwell said.

"It was mostly for staff and graduate students since faculty women have their own offices. But staff and graduate students often work in large, open areas. Maybe they have a cubicle, but it's not a private place."

Using the class's recommendations, Cornell built 14 formal lactation rooms in addition to the three that were already in place. "The students not only inspired us to increase the number of lactation rooms but also provided guidance on what

should be included in each room," said Lynette Chappell Williams, associate vice president for the Department of Inclusion and Workforce Diversity.

As their children grow older, working mothers remain concerned about their families' nutrition. The rise of maternal employment since the 1970s has coincided with a spiraling increase in childhood obesity, leading many researchers to conclude that children are more likely to be overweight if their mothers work.

Why this correlation exists is the focus of a recent study coauthored by John Cawley, professor of policy analysis and management who researches the economic causes and consequences of obesity. Using a national survey documenting how Americans spend their time, Cawley finds that women who work full time spend about three-and-a-half fewer hours per day on activities such as grocery shopping, preparing meals, and playing with their children, compared to stay-at-home and unemployed mothers.

Men offset little of this decrease, however. Cawley's study

finds that in homes with employed mothers, working fathers contribute just 13 extra minutes to such daily activities while nonworking fathers devote 41 additional minutes to these chores. To compensate > > >



A mother and newborn in a new lactation room in Martha Van Rensselaer Hall, offering privacy and convenience for nursing mothers.

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for the time lost while at work, mothers are more likely to purchase prepared foods either from restaurants or grocery stores, a phenomenon that is linked to a higher risk of childhood obesity.

Working mothers should not shoulder the blame, Cawley cautioned. Indeed, they produce additional benefits for children such as more money to provide for family needs. Furthermore, the study does not prove that employment alone drives the way mothers spend their time.

“Mothers who choose to work might be those who enjoy cooking less and who would cook less whether they are working or not,” Cawley said.

“Even if one thinks that there is a causal relationship, you don’t have to turn back the clock with respect to women’s labor force participation to address the problem of childhood obesity,” he said.

What could combat rising childhood obesity rates, Cawley said, are new laws that will require chain restaurants to post calorie counts for their products and a commitment by schools to promote healthy eating and offer more physical education classes.

“I think that one of the most important contributions that social scientists can make is to offer a dispassionate investigation of sensitive and emotional topics,” he said. “The responsibility of the social scientist is to do careful, honest work and promote an open, reasoned discussion of such issues.”

• • •

## Institute Aims to Remove Barriers to Woman Scientists

**BY WENDY M. WILLIAMS,  
PROFESSOR OF HUMAN  
DEVELOPMENT**

In late 2009, Stephen J. Ceci and I founded the Cornell Institute for Women in Science (CIWS) with funding by the National Institutes of Health to seek answers through empiricism rather than social activism concerning the lack of women in science. Women are underrepresented in many fields of academic science, particularly computer science, physics, engineering, chemistry, economics, and mathematics, where they comprise less than a third of assistant professors and less than 12 percent of full professors. CIWS relies on original research by its own members and other scholars to develop strategies to address today’s issues affecting women in science.

It soon became clear that the usual culprits—sex discrimination in hiring, promotion, and grant and manuscript reviewing—no longer accounted for the current dearth of women in academic science. In fact, according to a National Research Council report from 2010, if women today apply for tenure-track jobs in science, technology, engineering, and mathematics (STEM) fields, their chances of being interviewed and hired top those of men. CIWS research showed that young women scientists in college, graduate school, and postdoctoral years choose not to apply for tenure-track jobs due to the incompatibility of high-stakes research professorships with the biological clock.

University policies dating from the era when men with stay-at-home wives populated the academy place women in the unfortunate situation of having to produce a significant portfolio of scholarship to be reviewed favorably for tenure—all at the exact same time as birthing and rearing small children. CIWS has found that changing the policies that create a decade-long impossible squeeze for women scientists must be a major part of the focus of efforts to attract more women scientists into the academy.

With fully half of its efforts directed toward outreach, education, and extension work, CIWS aims to effectively inform university administrators, professors, and young women scientists themselves, as well as their parents and teachers, about the challenges. CIWS has produced and released a video series on its YouTube channel with educational and inspirational videos profiling women in science ranging in age from 8 to 68. Profiles include the 14-year-old winner of the national Google Science Fair, an exhibitions curator at Ithaca’s Sciencenter who earned one of the first Ph.D.s in physics at Cornell bestowed to a woman, a 26-year-old international energy engineer, and a portrait of three young girls talking about how they discovered their love of science.

Each video, empirically validated to enhance women’s interest in science, is accompanied by an extension-education module appropriate for middle and high school on up. The modules provide relevant summaries of background literature and references, and offer key questions for classroom discussion to help students reason creatively with the issues. All CIWS materials—including the entire curriculum, all scientific publications, and media interviews—are available free for public download. The College of Human Ecology, with its mission to unite research and outreach, has provided the perfect home for CIWS and its work to translate empirical research on women in science into meaningful, high-impact policy change.



Carol Jennings, Park Productions



*Stills from one of the CIWS videos where young girls visit the Ithaca Sciencenter and speak about their love of science.*

### For more information:

CIWS  
[www.human.cornell.edu/hd/ciws.cfm](http://www.human.cornell.edu/hd/ciws.cfm)

Women in Science  
YouTube Channel  
[www.youtube.com/user/womeninscience1](http://www.youtube.com/user/womeninscience1)

# Using Gardens to **Plant the Seeds** of Good Health, Education

BY DANI CORONA

At dozens of low-income schools spread across New York, Arkansas, Iowa, and Washington, elementary students are growing fruits and vegetables—and their minds.

The novel Healthy Gardens, Healthy Youth project, launched in April 2011 with a \$1 million grant from the U.S. Department of Agriculture and likely to reach as many as 2,500 students in 50 schools, seeks to encourage young children to eat more fruits and vegetables at school and at home, to boost their activity levels, and to enhance their knowledge of nutrition and food systems.

Nancy Wells, associate professor of design and environmental analysis, directs the project's research team and is leading its randomized study to measure the impact of gardens on key outcomes. The project is supported by a network of nutrition, horticulture, and youth development educators at Cornell Cooperative Extension (CCE) in New York and extension counterparts in the three other participating states. The research team also includes Charles Henderson, senior research associate in human development, and Jennifer Wilkins, senior extension associate in nutritional sciences.

In addition to working in the gardens, teachers are making the gardens an outdoor classroom, where students can learn about math and science amid rows of vegetables. For instance, in one 4th grade class in Rockland County, teachers reported that students practiced math concepts by measuring the heights of plants and totaling blossoms in the garden.

Wells, an environmental psychologist whose past research has shown the positive impact of nature on children's health and cognitive functioning, is excited about the many potential benefits of the gardens.

"It is a rare intervention that has the potential to affect both diet and physical activity," Wells said. "What's unusual and exciting about the gardens is that they may be a very potent intervention in terms of childhood obesity, especially because they could affect both sides of the energy balance equation."

An early challenge for Wells's research team, which includes Cornell undergraduate and graduate students, was determining how to objectively measure students' meals and movement, which would be compared in schools with gardens versus control groups at schools without gardens.

They couldn't expect young children to keep accurate food records, nor could they independently observe every child at lunch. To solve the problem, they photograph each child's lunch trays before and after eating and later examine the pictures and do a nutritional analysis.

With funding from the Robert Wood Johnson Foundation's Active Living Program, the team quantifies physical activity using accelerometers—pedometer-like instruments that measure energy expenditure—worn by the children on three consecutive school days. Beth Myers, a DEA Ph.D. student on the research team, also developed a direct observation measure to record children's activity in the garden.



A student from Roberto Clemente School No. 8 in Rochester, N.Y., adds soil to his school's raised garden bed.

Myers, who served for three years in Teach for America and completed her master's in public health prior to studying at Cornell, also sees great potential for gardens to enhance children's learning.

"I think what's it about—when you are a teacher—is trying to maximize opportunities for kids, and a garden presents an active learning experience. It provides an extra space for informal and formal learning, and brings some balance," said Myers.

When the study concludes in late 2013, the project figures to have a long-lasting impact on participating children, schools, and communities. Thanks to the broad reach of cooperative extension networks, educators and volunteers will remain in the neighborhoods to grow the garden-based learning programs.

"We aren't just collecting data and leaving," Myers said. "As we design the research, CCE educators not only build the gardens but also relationships. There is a greater potential for health and educational benefits to carry on."

Ultimately, the goal of the study, which includes seed funding from the Atkinson Center for Sustainability and the College of Human Ecology, is to make a difference early in children's lives, at a time when they are forming lifelong food and nutrition habits.

"Where the pieces come together, where teachers are fully implementing the curriculum and the students have chances to experience the fresh food, it should have an effect," Wells said. "We wanted to study young kids, because we wanted to influence their food choices early to hopefully set them on a trajectory toward a healthier life." • • •

*Dani Corona '15 is a student communications assistant for the College of Human Ecology.*



# What I Did Last Summer: Research and Outreach

BY TED BOSCIA

Ariel Hart '13, a Biology and Society major, spent her summer visiting central New York homes to observe infants at play, trying to decode how children's home environments connect to their long-term emotional and cognitive development. She explored the roots of the well-documented "income achievement gap"—why children who grow up in poverty tend to fall behind in school achievement, health, and other key areas.

An aspiring doctor who wants to specialize in family medicine, Hart believes the experience will help her to "maintain this holistic view in the treatment I give to my patients and the greater community I serve."

Last summer, Hart and 14 other students aided faculty research on topics as varied as childhood obesity, nutritional biochemistry, and nonsuicidal self-injury through the College of Human Ecology's Undergraduate Summer Research Awards program. Ten others interned with Cornell Cooperative Extension, supporting community projects in more than 15 New York counties. Meanwhile, dozens more Human Ecology students worked at internships around the globe to strengthen their professional skills.

"A core mission of our college is to provide undergraduates with opportunities to integrate their curriculum with research and outreach in real-world settings," said Alan Mathios, the Rebecca Q. and James C. Morgan Dean. "As students prepare to graduate, our goal is to help them not only be critical thinkers and consumers of knowledge, but producers of knowledge with the focus on connecting findings to individuals and communities in ways that have a meaningful positive impact."

In faculty labs, in communities across the state, and at jobs and internships, Human Ecology students made a powerful impact this summer. Read on for firsthand accounts of their experiences. > > >

*In home visits, students observe how family environments influence child development.*









## Julie Avrutine '13

Major: Human Development

Project: Interventions for Risk Reduction and Avoidance in Adolescents, directed by Valerie Reyna, professor of human development

As an undergraduate research assistant, I work on a project that teaches adolescents about healthy eating and fitness and sexual health. I work on this study in the Ithaca area during the academic year, but this past summer I worked in New York City through the Cornell Cooperative Extension internship program. (See related sidebar on page 13.)

The study environment for the summer was vastly different from Ithaca. My first duties were to contact sites where we could administer our curricula and recruit students to participate in the intervention. I spent many hours researching Beacon Programs, Summer Youth Employment Programs, and summer camps for adolescents ages 13–18. After a few weeks of coordinating with sites, we began teaching in two different neighborhoods: one in Brooklyn, and one on the Upper East Side.

Though I have taught several times in Ithaca and served various populations, I had a unique and inspiring experience teaching in New York City. I was forced out of my comfort zone—a daunting task at first—but then quickly realized how much I truly benefited from exposing myself to new people and places. Even more, I was lucky enough to see firsthand how my teaching and our curricula impacted the adolescents we worked with.

The professionals with whom I worked also greatly contributed to my experience by guiding me with their expertise, which was invaluable to me throughout the summer. In the future, I aspire to have the same level of understanding that they do about public health, working with teens and carrying out successful interventions.

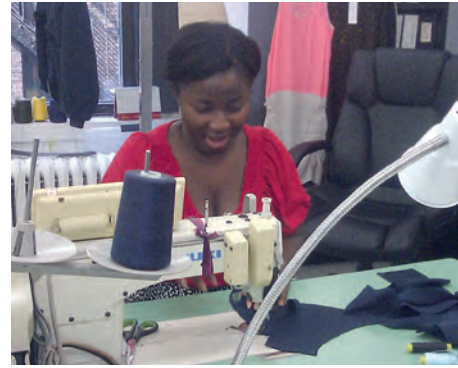
My experience this summer certainly reaffirmed my passion for promoting and actively participating in public health initiatives after my graduation in May. Not everything was easy or simple, but any adversity or stress just further prepared me for real-world experiences. Overall, I could not be more thankful for this internship. Not only was I able to grow and mature as a researcher, student, and individual, but I was able to follow my deep-rooted passion for helping others and making an impact on their lives.

## Matilda Ceesay '13

Major: Apparel Design

Project: Summer Internship, Diane von Furstenberg

I was a soft-wovens intern with Diane von Furstenberg at the company's uptown Manhattan design studio. The department I worked in designs garments from soft or lightweight materials: Cady crepe, kimono crepe, pebbled habotai, chiffon, cotton voile, and other fabrics.



My department had one designer and two assistant designers, and I worked with all three of them. I did everything from mocking up sample

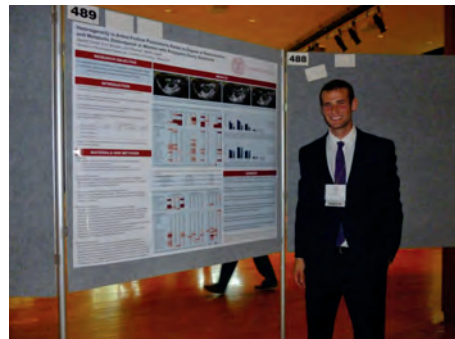
design variations with test fabric, to coffee runs, to searching the Garment District for fabrics or trim, to researching themes and images for the collection.

The staff loved their jobs and wanted to make sure I got the most out of my internship experience. I realized I wasn't just a lowly intern but a member of their team, a person who was there to help make their job easier, and they valued me.

The highlight of my internship was the day Diane invited a handful of interns to the design meeting to discuss the theme of the next collection. Diane not only talked about the collection but about her identity as a woman, designer, and businesswoman. She told us about how she created her first wrap dress, the history of the company, and the direction she hoped to go in the future. She said she wasn't going to listen to society's ideas of how a woman should act and live. She talked about loving life and loving yourself.

She offered everyone a copy of her biography, and we all went up one by one to get our books signed. When it was my turn, I told her that she was my inspiration for studying design and that I also admired her as a businesswoman and a philanthropist. She smiled and gave me a hug and a kiss. Everyone got a signed copy of her book, but I was the only one who got a hug and kiss!

I returned to New York to help during Fashion Week in early September, serving as an assistant to the creative director's assistant. I helped with fittings and stylings for the show, as the team worked from hundreds of pieces to create the final 45 looks. I had seen the beginning stages of the collection during my internship, so it was great to see how everything finally came together.



## Jacob Christ '13

Major: Human Biology, Health and Society

Project: Toward a Reliable Estimate of Androgen Excess in Polycystic Ovary Syndrome, directed by Marla Lujan, assistant professor of nutritional sciences

I used to view medicine as a static field, tried and tested over centuries of practice and perfected to the state it is today. Since joining Professor Lujan's research lab in 2011, I have seen it is anything but that.

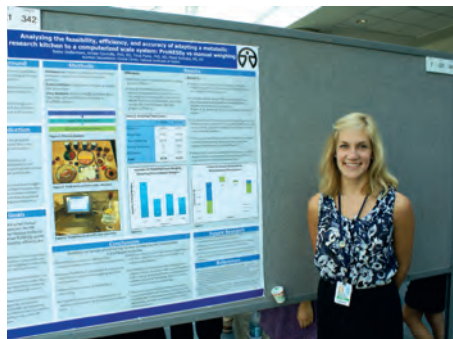
Last summer, I continued my work in her lab on Polycystic

Ovary Syndrome (PCOS). This endocrine disorder is one of the most common causes of female infertility and has many serious complications such as cardiovascular disease, diabetes, and depression. Even though it is fairly prevalent, it is still largely a mystery, even its diagnosis.

In most women's ovaries, several small follicles develop, each competing to be the one dominant follicle to eventually go on to ovulate. In women with PCOS, something malfunctions in this pathway. These women have many more small follicles than their unaffected counterparts and most fail to ovulate, leading to absent or irregular menstrual cycles. Although this disease manifests itself in the ovary, it also is marked by elevated androgen levels and has been associated with serious metabolic disturbances. My research goal was to see how these complications related to specific variations in follicle distributions.

In addition to working on my project in Ithaca, I presented my research at the annual meeting of the Society for the Study of Reproduction at Pennsylvania State University. There I was able to meet some of the leading researchers and physicians in our field and talk with them about my results as well as their findings. Being surrounded by so many people passionate about and knowledgeable in reproductive medicine was exciting and beneficial to my own work. I developed new ideas about how to analyze my data and was able to use the feedback to expand my work.

As I progressed through my project, I realized how much remains to be discovered in medicine and the importance of original inquiry. I saw that much of this work requires collaborations between peer researchers and I experienced some of the community aspects of science.



### **Bailey DeBarmore '13**

Major: Nutritional Sciences/Dietetics  
Project: Summer Internship, National Institutes of Health

I didn't really know what the National Institutes of

Health (NIH) was all about until I spent time there. Through the NIH Summer Internship Program, I quickly discovered how much goes on there.

The NIH found out that rats carried bubonic plague. Chemotherapy was first developed at the NIH as a way to treat cancer. And the NIH is working on an AIDS vaccine. The NIH is, essentially, where it all happens. Not only that, but the NIH spends most of its money from Congress funding research at other institutions, such as Cornell.

During the summer, I worked in the Nutrition Department of the NIH Clinical Center (CC). The CC takes patients that have no other treatment options—human subjects willing to test new drugs in the Phase I and II trials to determine drug toxicity and dose response. The CC is also where you'll find congregations of patients with rare diseases. Only 10 cases in the world? You might easily find six such patients at the NIH. The CC works to treat patients now, but also to better the health of the entire world for the future.

In addition to shadowing clinical dietitians on rounds (lymphomas one day, endocrinology the next), I worked with the research dietitians on my own project. I investigated the feasibility, accuracy, and efficiency of converting the metabolic kitchen at the NIH CC from a manual weighing method to a computerized scale system. The metabolic kitchen is where special meals are prepared for subjects who must consume only a certain amount of calories. The cooks weigh in and out to determine what people eat. As of this summer, they used a manual scale and wrote everything down on paper. I found it is possible to adopt a software program that connects the scales to computers, which automatically transfer the data, removing human error and saving time. I presented my first science poster on the topic at the NIH's Summer Student Poster Day.

Ultimately, I learned that nutrition research is an incredibly important part of dietetics. I learned that I love interacting with patients. And I learned that the NIH is an amazing place to be.



### **Alexandra Gensemer '13**

Major: Human Development

Project: Healthy Gardens, Healthy Youth, directed by Nancy Wells, associate professor of design and environmental analysis

After working as a

research assistant in Professor Wells's lab my junior year, I spent my first summer in Ithaca as a Cornell Cooperative Extension (CCE) intern to continue on the Healthy Gardens, Healthy Youth project. The summer allowed me not only to focus on research full time but to go into the gardens. (See related story on page 19.)

My first project this summer was a weeklong trip to the Catskills for data collection. I worked with CCE Delaware County at two elementary schools to collect images of students' lunches, survey booklets, and physical activity data using devices called accelerometers. I had been sorting similar data for months as it arrived in the lab. Collecting it firsthand was a new and exciting experience.

Despite rainy weather, the students were thrilled to go outside and plant their gardens. "Team Green Bean" worked diligently to make sure their seeds would sprout. Other children ran back and forth from the hose to the garden with the watering pail. Everyone noted the strong smell of basil in their field notebooks, as they took the measurement of its height with their rulers.

During the spring semester, we had piloted and trained under an observation system that quantifies children's activities, motions, and associations in the garden. I enjoyed taking these observations during the summer to communicate the effectiveness of school gardens at increasing children's physical activity. > > >



I returned to Ithaca, where a pile of mail awaited me: data from our 50 participating schools in Arkansas, Iowa, New York, and Washington was arriving from our team of 30 extension educators. There were as many exciting things in these envelopes as in my trip to the garden, such as colorful pictures of fresh garden produce on previously unappetizing cafeteria trays!

I am continuing my work on the Healthy Gardens, Healthy Youth project. As a human development major, I am particularly interested in children's "at home" routines. Research gives me opportunities to apply my knowledge outside the classroom, develop new skills, and grow.

### **Robert Guber '15**

Major: Biology and Society  
Project: The Role of SEL1L on LPL Maturation, directed by Ling Qi, assistant professor of nutritional sciences

Working in Professor Ling Qi's lab, I learned all of the integral techniques needed to work in a molecular biology lab. Specifically, I mastered the techniques of western blotting, mutagenesis, co-immunoprecipitation, DNA sequencing, genotyping, and other techniques.

My analytical skills have greatly improved since working in the lab. I have become skilled at using the newest software to image gels. I went from having my postdoctoral supervisor analyze my data for me to creating my own data reports to send to Professor Qi.

One of the most surprising things that I discovered was the interaction between the endoplasmic reticulum (ER) membrane proteins and lipases. I was truly inspired when I confirmed the interactions between lipoprotein lipase and the SEL1L protein that was originally seen by my mentor. These novel ideas increased my love for learning, because the more I learned about the science behind the mechanisms, the more interested I became. There were certain experiments where the result appeared wrong or just didn't fit the hypothesis, but with the help of my mentor I was able to plan new experiments to further investigate these anomalies.

I plan to continue working in this laboratory for the next three years and have already resumed my work from this summer. I want to improve our knowledge of lipoprotein lipase maturation and the role of SEL1L in this process.

I also want to further my studies of the ER since it is fascinating to understand how proteins fold, leave the ER, and how they interact with each other. Additionally, there are many other projects in Dr. Qi's lab, and I have the ability to learn from the different graduate students.

In addition to learning many practical lab and analytic skills, I have learned how to work on grant proposals, how to give thorough presentations, and how to work cooperatively in a lab. These experiences have truly helped to further develop my passion for science.



### **Ariel Hart '13**

Major: Biology and Society

Project: Early Origins of the Income Achievement Gap, directed by Gary Evans, professor of human development and of design and environmental analysis

As I closed the door behind me and walked out of the house, my mind was reeling with questions. I wondered how this infant's unique environment would impact his education, career, and even health, years down the line. Would his parents' low socioeconomic status steer him to becoming another example of the income achievement gap? Would his construction-worker father be able to provide a stable and secure environment to shield the infant from the chaos that plagues many low-income households?

After peeking into the homes of so many families over the past few years and evaluating the naturalistic behaviors of child caregivers, I knew that this infant's situation didn't fit cleanly into the picture that I had become so accustomed to. He had a pool and swing set to allow him to play safely outdoors, while most were deprived of this luxury.

I also knew that a variety of factors, such as the amount of green space around a child's house or the noise level inside, may play a role in the disparity between achievement of low-income and high-income students in academic settings. And these disparities might be apparent in children as young as one or two.

As a Cornell Cooperative Extension intern this summer, I considered the impact maternal behavior could have on, for example, an infant's emotion regulation and how this might impact attention in the classroom. From recruiting participants, to observing their behavior, and finally analyzing the data, I began to understand how each assessment sought to evaluate another potential factor in the puzzle that is academic disparity. I have realized that the "gaps" in our society cannot be closed by a single bridge, but that disparities require multi-faceted, long-lasting, and early interventions.

As I work toward becoming a family care physician, I hope to maintain this holistic view in the treatment I give to my patients and the greater community I serve. I have created my own research project for this coming year, which will examine the relationship between income and the development of specific behaviors that may influence a child's risk for becoming overweight.

## Jill Hsia '13

Major: Human Biology, Health and Society

Project: Baby Games, directed by Gary Evans, professor of human development and of design and environmental analysis, and Marianella Casasola, associate professor of human development

As a student academic advisor in the Division of Nutritional Sciences, the most common question I hear from new students is, "How can I get involved in research?" When I first arrived at Cornell, I was anxious to do research as well. As a pre-medical student, I was told that research was very valued by medical schools, but I wasn't completely sure why.

I began working on the project I worked on this summer, Baby Games, my sophomore year. It is attempting to determine whether there are cognitive differences between infants in families of low versus middle socioeconomic status. We videotape two sessions engaging both mother and child, with one session in our lab and the other in the participants' home.

Over the past two years, I have worked on almost every aspect of the study—from struggling to recruit low-income infants, to collecting data in households plagued by immense poverty, to painstakingly coding the data that we collect, to analyzing the numbers with statistical software. The skills I've gained are immense: I have become more proficient at managing logistics, more cognizant of small but important details, and better able to maintain my composure in stressful, chaotic situations. I work more efficiently with others and can more readily think of creative solutions to difficult problems. My communication skills have improved as well.

This summer I was able to devote all of my efforts to the study, without the distraction of class or extracurricular activities. One day, when I was frustrated beyond belief after being presented with data that did not support the hypothesis, I finally pinpointed why research experience is valued so much not only by medical schools but by employers as well.

Conducting research demands that you add your own independent thinking to existing knowledge. The potential for failure is ever present. But so is the potential to discover something completely new, something that could change the way we view our world. And that's why researchers are so valuable—we are capable of innovative thinking that can propel us toward a world that is more equipped to tackle human problems, whether they are biomedical, social, or ethical.



## Alyssa Thompson '13

Major: Nutritional Sciences/Dietetics

Project: Adopting Health Habits (AHH), directed by Jamie Dollahite, nutritional sciences associate professor

For my Cornell Cooperative Extension internship, I worked on a project called Adopting Health Habits (AHH), which facilitates healthy lifestyles in New York's North Country (Jefferson, Lewis, and St. Lawrence Counties), a rural region that struggles with poverty and obesity. The main projects I worked on were assessing a media campaign AHH launched in the target counties and evaluating the success of eight mini-grants AHH awarded to schools and organizations in Jefferson County. Both projects aimed to increase healthy eating and physical activity behaviors.

The media campaign reached 393,880 people in the target counties and beyond, and the mini-grants were successful in promoting physical activity and healthy eating behaviors in Jefferson County children.

I gained many professional and life experiences, while learning how to collaborate with team members locally and in the target counties. I attended numerous meetings to help coordinate the project. I made site visits in the counties to observe the local characteristics and distribution of food sources. And I tackled projects I have never done before, such as creating a summary report of a study and tip sheets for understanding local media sources.

It was interesting to see the lack of food resources available to the North Country, and this inspired me to continue future work to facilitate healthy eating and physical activity efforts in rural areas. I am excited to continue work on the Adopting Healthy Habits project this school year.

I have gained more professionalism and real-world experience this summer than I could ever learn from just taking classes at Cornell. While my Cornell education is very valuable, the relationships I fostered and skills I learned in this internship will continue to guide me in my career and my life for years to come. . . .

**"Conducting research demands that you add your own independent thinking to existing knowledge. The potential for failure is ever present. But so is the potential to discover something completely new, something that could change the way we view our world."**

**—Jill Hsia '13**



# Human Ecology Mentors Offer Lifelines to New Students

BY DANI CORONA

When Christina Lantuh '15 imagined her first semester of college, she never foresaw visiting a professor's home for dinner, friendly conversation, and Christmas cookies for dessert. The semester-end meal, arranged by Patsy Brannon, professor of nutritional sciences, through the Human Ecology Peer Partnership Program, was filled with hearty food and advice—a sweet conclusion to the program that eased Lantuh's initial months at Cornell.

For first-year—and in many cases, first-generation—students like Lantuh, Cornell is an unfamiliar academic and social territory with a maze of classes, resources, and opportunities. Such a beginning can be as overwhelming as it is exciting.

To help incoming students get their footing, the College of Human Ecology offers a long-running Peer Partnership Program that taps faculty members and upperclass students to be role models. Since 1996, it has helped more than a thousand students start their Cornell adventure—particularly students of color and others from traditionally underrepresented backgrounds.

Under the program, each fall faculty members and upperclass student peer mentors work with groups of five to seven freshmen or transfer students. They meet for fun activities, such as trips to the clock tower, house dinners, or sporting events, where they can talk about anything from academic struggles to Cornell social life. Mentees also share at least one class paper with their mentors for a critique, and together they attend an on-campus discussion with Cornell alumni about their academic and career experiences. Finally, the program also helps to orient students—many of whom grew up far away—to Cornell's sprawling campus and the surrounding area.

"The informal interaction provides members from across the Human Ecology community chances to connect," said Verdene Lee, senior associate director of the college's Office of Admissions, Student, and Career Development, who heads the program with Gary Evans, the Elizabeth Lee Vincent Professor of Human Ecology. "The relaxed relationships usually develop and continue on unofficially into the spring and throughout students' careers."

Brannon, a faculty mentor active in the program, agrees: "It builds a very safe place to talk about issues or to share advice. It's far-reaching and helps students realize that they need to develop balance and a perspective here at Cornell. College can be an experience that can feel isolating—this is a way for students to share experiences and commonality."

Upperclass students apply to become mentors during the spring semester. If accepted, they complete a three-credit, interactive seminar run by Lee and Evans that covers such topics as cross-cultural counseling and journal writing to



Arin Grant '13 (left) advises Christina Lantuh '15 through the Peer Partnership Program.

prepare them to aid mentees of all backgrounds and needs.

"The seminar was a great personal development course—it equipped me with listening skills and taught me how to talk about racial differences and be aware of information about demographics," said Arin Grant '13, a policy analysis and management major who benefited from the program as a freshman and went on to become a mentor. "Really, it reminded me to be a helpful, relevant leader every day."

Grant's experience is common, as many of the mentees wish to return the favor as mentors—a powerful cycle that has made the program a model of success. In October, Lee made a presentation about the program at the 2012 Mentoring Institute Conference at the University of New Mexico, sharing her knowledge with other universities seeking to aid first-year students adapting to the unfamiliarity of college. Human Ecology will soon launch a research project to evaluate the program's effect on graduation rates and academic performance.

"The program presented experiences that I wouldn't have explored on my own," Lantuh said. "I felt very lucky to have both the peer and faculty mentors who could show me the ropes the very first semester of college." • • •

*Dani Corona '15 is a communications assistant in the College of Human Ecology.*

# Researchers Examine Programs to Help Military Families

BY SHERI HALL

More than 3 million people serving in the U.S. Armed Forces on active and reserve duty spend months away from their families, relocate frequently, and work in some of the world's most dangerous environments. Such demanding jobs create unique needs among service members and their families, which the U.S. military strives to meet through education, counseling, and support programs.

To help strengthen such support programs for service members and their families, researchers at the college's Bronfenbrenner Center for Translational Research (BCTR) are working with the U.S. military to implement evidence-based programming and conduct research studies and outcome evaluations.

"We were doing translational research before it was called translational research," said Marney Thomas, co-principal investigator on Cornell's Military Projects initiatives, which began in 1991 in conjunction with the U.S. Army. "When we can provide Army Family Program Headquarters staff with strong evidence that one of their programs works, it sends the signal that the program should be continued since it improves quality of life, builds resiliency, and enhances retention in an all volunteer force."

This year, the BCTR team launched a benchmark study to assist the Department of Defense's (DoD) Office of Community Support for Military Families with Special Needs in its efforts to aid military families with spouses, children, or other dependents who require special medical or educational services. In partnership with researchers at the University of Kansas, Cornell recently completed a comprehensive review of existing programs and policies offered under the Exceptional Family Member Programs (EFMP) serving more than 100,000 families across all branches of the military.

"As more and more military families are serving on joint bases and move between service locations, it is important that programs and services are as equitable as possible," said principal investigator Brian Leidy. "Information from the current study will assist the DoD in standardizing policies and programming."

The EFMP benchmark study maintains a long tradition of Cornell research findings shaping military programming. In the case of young parents, for instance, who are often isolated from family support networks and serving in far-flung locations, the military provides a version of the Nurse-Family Partnership model, which was developed at Cornell in the 1970s to help new parents by offering them in-home visits with nurses to discuss health behaviors, parenting skills, and child development. Leidy, Thomas, and colleagues will be conducting a study for the Army's home visitation program to better understand how it enhances attachment, engages fathers, and connects families to the community.

In another example, the BCTR team found that soldiers who take financial literacy courses are more likely to avoid common money pitfalls. "What's most interesting is that they're more likely to seek out other financial readiness



*A sailor reunites with his family at a homecoming for the U.S. Navy.*

courses about things like investments and retirement on their own," said Thomas, who continues to collect data on this program.

The team is also evaluating the Army Family Advocacy Program, which is tasked with educating commanders about the importance of their role in child and spouse abuse prevention and intervention services. Leidy and Thomas evaluated this program in 2003 and 2008, documenting that commanders who receive briefings are more likely to attend meetings about abuse cases and more likely to endorse the treatment plans.

"As a result, both the victim and perpetrator are more likely to complete treatment and the family is less likely to experience a subsequent incident of maltreatment," Leidy said. "The idea is that if you get good commander support for these programs, soldiers and families do better."

This work is funded by the National Institute of Food and Agriculture, the U.S. Department of Agriculture, and the U.S. Department of Defense in partnership with Cornell University. • • •

*Note: Any opinions, findings, conclusions, or recommendations expressed in this publication are those of the author and do not necessarily reflect the views of the U.S. Departments of Agriculture or Defense.*



# Six New Scholars Join the College Faculty

After hiring 10 new faculty members last year, the College of Human Ecology added six scholars for the 2012–2013 academic year—a talented and diverse group with expertise ranging from sustainable design to demography to nutrition and disease.

The college's aggressive pace for hiring new faculty is part of Cornell's overall strategy to replace the estimated one-third of the university's faculty who are expected to retire over the next decade. President David Skorton has made "faculty renewal" one of the university's four key strategic concerns. Here are details on the college's newest faculty:



**Matthew Hall**, assistant professor, policy analysis and management

**Academic focus:** demography, immigration/migration, racial/ethnic inequality, and spatial analysis.

**Previous positions:** assistant professor, Department of Sociology, University of Illinois at Chicago, 2010; assistant professor, Institute of Government and Public Affairs, University of Illinois, 2010.

**Academic background:** B.S., sociology, Western Washington University, 2004; M.A., sociology and demography, Pennsylvania State University, 2007;

Ph.D., sociology and demography, Pennsylvania State University, 2010.

**I chose Human Ecology because:** of its cross-disciplinary nature, its faculty who share common interests on pressing social issues, and its ambitious students.



**Rebecca Seguin**, assistant professor, nutritional sciences

**Academic focus:** community-based exercise and nutrition interventions; policies and programs to improve food and physical activity environments; aging; women's health; chronic disease prevention; translation and dissemination research.

**Previous positions:** staff scientist and project director, Public Health Sciences Division, Fred Hutchinson Cancer Research Center, 2009–2012; adjunct assistant professor, Friedman School of Nutrition Science and Policy, Tufts University, 2011–2012; research associate, John Hancock Research Center for Physical Activity, Nutrition, and Obesity Prevention, Tufts University, 2008–2009.

**Academic background:** B.S., clinical exercise physiology, Boston University, 1998; M.S., nutrition communications, Tufts University, 2004; Ph.D., food policy and applied nutrition, Tufts University, 2008.

**I chose Human Ecology because:** I was so excited by the friendly and positive energy of the faculty, their commitment to teaching, and the diversity of their research programs and expertise.



**Laura Tach**, assistant professor, policy analysis and management

**Academic focus:** the effect of housing and anti-poverty policies on inequality and family well-being; causes and consequences of family instability.

**Previous positions:** senior fellow, Leonard Davis Institute for Health Economics, University of Pennsylvania, 2010–2012; Robert Wood Johnson Foundation Health & Society Postdoctoral Scholar, University of Pennsylvania, 2010–2012.

**Academic background:** B.A., sociology, Pennsylvania State University, 2004; M.A., sociology, Harvard University, 2007; Ph.D., sociology and social policy, Harvard University, 2010.

**I chose Human Ecology because:** of its world-class faculty with interdisciplinary sensibilities.



**Anna Thalacker-Mercer**, assistant professor, nutritional sciences

**Academic focus:** mechanisms underlying skeletal muscle metabolic and inflammatory dysfunction in health and disease; the efficacy of nutrition and exercise interventions for metabolic health; the dynamics among amino acids, metabolites, and the development of insulin resistance in reproductive health and age-related disease.

**Previous positions:** assistant professor, Department of Cell, Developmental, and Integrative Biology, University of Alabama at Birmingham, 2010–2012; postdoctoral fellow, Department of Nutrition Sciences, University of Alabama at Birmingham, 2007–2010; graduate research assistant, Department of Nutrition Science, Purdue University, 2002–2007.

**Academic background:** B.S., biological sciences, University of Georgia, 2000; Ph.D., nutrition sciences, Purdue University, 2007.

**I chose Human Ecology because:** of the research, the potential for collaboration, and the welcoming environment.



**So-Yeon Yoon**, associate professor, design and environmental analysis

**Academic focus:** effective use of digital media to advance design research, education, and practice, bridging the areas of design and human-computer interaction.

**Previous positions:** associate professor, Department of Architectural Studies, University of Missouri, 2011–2012; assistant professor, Department of Architectural Studies, University of Missouri,

2005–2011; visiting professor, Department of Information Design, University of Ulsan, South Korea, 1999–2001.

**Academic background:** BHE, housing and interior design, Pusan National University, Korea, 1993; MHE, housing and interior design, Pusan National University, Korea, 1995; M.A., design with digital media, University of Missouri, 1998; Ph.D., information science and learning technologies, University of Missouri, 2004.

**I chose Human Ecology because:** it's a great place to explore interdisciplinary work in interior design, digital media for design, and human-computer interaction.



**Rana Zadeh**, assistant professor, design and environmental analysis

**Academic focus:** evidence-based design; sustainable design; healthcare and counseling facilities; financial effects of improved environmental quality; spatial analysis.

**Previous positions:** graduate research assistant, Texas A&M University, 2008–2011; student intern, WHR Architects, Houston, 2009; student intern, RTKL Associates, Dallas, 2008; designer, S.G.T. Construction, Iran, 2005–2007.

**Academic background:** M.Arch., architecture, Azad University of Tehran, 2005; Ph.D., architecture, Texas A&M University, 2012.

**I chose Human Ecology because:** it is a highly multidisciplinary college, and it has great people!

# Afterword

## Moving Toward New Destinations

BY SANDRA DHIMITRI

The rich exchange of ideas in a tightly knit college community and the “. . . any person . . . any study” motto penned by Ezra Cornell at our founding make Cornell University a place that welcomes faculty, staff, students, and visitors into a rigorous, engaging, and inclusive academic environment.

The university’s 2010–2015 strategic plan states President David Skorton’s aim to “make significant progress toward a more diverse faculty, student body, and staff in terms of gender, race, and ethnicity.” On Feb. 15, 2012, the president and provosts outlined a renewed expectation for a campus-wide approach that engages all university constituents in diversity initiatives, known as “Toward New Destinations.” Guided by the University Diversity Council (UDC), “Toward New Destinations” identifies four core diversity principles to foster the president’s vision (see box).

In connection with this new approach, the Human Ecology Diversity Committee, composed of faculty, staff, and students representing all departments, guides and implements diversity initiatives at the college. The committee is working to implement six initiatives that will help the college continue to secure diverse applicant pools for our faculty and staff positions, further develop student advising and professional development opportunities to promote engagement across differences, develop tools and processes to document measureable success, and communicate diversity’s role in accomplishing the college mission.

The new approach from the UDC that encourages clear measures of success at the college level is helping to evaluate and shape numerous programs at the College of Human Ecology that seek to create an environment that enhances academic success for all students. For instance, the college’s Peer Mentorship Program (see related story on page 26), directed especially at students of color, has been coordinated for 16 years by faculty in concert with our Office of Admissions, Student and Career Development. This year, the college Diversity Committee will study the program to gauge its effectiveness at ensuring student academic success. The group also intends to evaluate rates of undergraduate research in the college, with a particular focus on participation by underrepresented groups.

A third initiative the committee will pursue is to develop and conduct a survey for faculty, staff, and students that assesses the current climate for diversity and inclusion. The college last conducted such a survey 10 years ago, so this assessment promises to offer valuable information to the committee for its future planning.

The “Toward New Destinations” approach is also a strong reminder of the many constituencies that make up our community. At the College of Human Ecology, the



implementation of diversity initiatives reflects a blended approach of faculty, staff, and student perspectives. From the composition of the diversity committee to the selection of initiatives, the aim is to have the consideration of the process match the diversity of our community.

The longstanding commitment to diversity and inclusion at the College of Human Ecology sets a clear example of how the benefits of “Toward New Destinations” can have a real impact in moving our diversity initiatives further in line with the university’s broader goals. The college has and continues to embrace diversity as central to our mission.

All of the diversity initiatives are described on our web site: [www.human.cornell.edu/about-the-college/diversity/](http://www.human.cornell.edu/about-the-college/diversity/).

*Sandra Dhimitri is the director of Human Resources for the College of Human Ecology.*

### “Toward New Destinations” core principles:

- composition, which refers to the demographic make-up of a unit, such as strategies for attracting and/or retaining more members from underrepresented groups
- engagement, which refers to the personal, social, and professional commitment to institutional goals and activities, such as developing activities and events that “promote opportunities for engagement across difference”
- inclusion, which involves strategies to improve the campus’s multicultural climate and interpersonal relationships
- achievement, which reflects levels of attainment for underrepresented individuals or groups, through, for example, leadership training, honors, awards, and other milestones



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Photo courtesy of the Division of Rare and Manuscript Collections, Cornell University Library

In the early 1960s, women educators from nine African nations visited what was then referred to as the College of Home Economics on a trip sponsored by the United States Agency for International Development. The women—from Nigeria, Sierra Leone, Kenya, Ghana, Tanganyika and Zanzibar (now Tanzania), Nyasaland (now Malawi), Southern Rhodesia (now Zimbabwe), and Northern Rhodesia (now Zambia)—learned about the college's approach to domestic science and other matters of the home and how to replicate similar teaching, research, and extension programs in their own countries.

In the preceding two decades, the number of international visitors to the college grew steadily, especially with the reconstruction of Europe and Japan following World War II. College faculty members also visited foreign countries on teaching, research, and engagement assignments, with about 20 percent having gone overseas by 1965.