

Cornell University
Housing Research and Education Program

Overview and Organization

Professor Joseph Laquatra, Ph.D., coordinates housing research, education, and Extension efforts within the Department of Design and Environmental Analysis at Cornell University. Specific elements of the program include special studies courses for undergraduates, graduate advising in the Human Environment Relations major (M.S.) and in the Human Behavior and Design major (Ph.D.), and Extension activities. Graduate students study sustainable aspects of housing and focus on topics such as affordability, energy efficiency, housing for special populations, indoor air quality, and other relevant subjects. Extension activities are coordinated through two Program Work Teams (PWT) of Cornell Cooperative Extension, for which Professor Laquatra serves as lead co-chair: the Renewable Energy and Energy Efficiency PWT and the Family Economic Resource Management PWT. Professor Laquatra and Extension Associate Mark Pierce coordinate other Outreach efforts by working with appropriate groups, organizations, and agencies.

Publications

Laquatra, J. and M. Pierce (2009). Taking construction site waste management to the next level. *Journal of Green Building*, 4(4): 1 – 4.

Laquatra, J.; M. Pierce; N. Helmholdt (2009). The consumer education program for residential energy efficiency. *Journal of Extension*, 47(6). Available at:
<http://www.joe.org/joe/2009december/a6.php>

Laquatra, J. (2009). Air pressure and energy-efficiency issues in homes. *Housing and Home Environment News*, Spring. Available at:
<http://www.human.cornell.edu/che/DEA/outreach/upload/HHE-news-springr-09NJ.pdf>

Laquatra, J. (2009). Green jobs: what they are, where they are, and how to get one. *Housing and Home Environment News*, Fall. Available at:
<http://www.human.cornell.edu/che/DEA/outreach/upload/HHE-news-Fall-2009-final-2.pdf>

Forsyth, A.; E. Greenhouse; N. Wells; L. Maxwell; J. Laquatra; D. Kay; J. Tiffany (2009). Residential environments for older Americans and their sustainability: from the room to the region. *Proceedings of the Aging and Environment Conference*, Ithaca, NY: July 23 – 24, 2009.

Potter, G. and J. Laquatra (2009). Residential lighting: history, energy efficiency, and health effects, *Proceedings of the 2009 Annual Conference of the Housing Education and Research Association*, Santa Fe, NM: pp. 169-174.

Pierce, M. (2009). The regional greenhouse gas initiative and the debate over cap and trade versus a carbon tax. *Housing and Home Environment News*, Spring. Available at: <http://www.human.cornell.edu/che/DEA/outreach/upload/HHE-news-springr-09NJ.pdf>

Pierce, M. (2009). Architectural style of New York's older houses. *Housing and Home Environment News*, Spring. Available at: <http://www.human.cornell.edu/che/DEA/outreach/upload/HHE-news-springr-09NJ.pdf>

Pierce, M. (2009). Portable electric heaters: can they reduce annual home heating costs? *Housing and Home Environment News*, Fall. Available at: <http://www.human.cornell.edu/che/DEA/outreach/upload/HHE-news-Fall-2009-final-2.pdf>

Pierce, M. (2009). Architectural style of New York's older houses: the Gothic revival style. *Housing and Home Environment News*, Fall. Available at: <http://www.human.cornell.edu/che/DEA/outreach/upload/HHE-news-Fall-2009-final-2.pdf>

Presentations

Laquatra, J. High performance housing. Niagara County Energy Fair, Lockport, NY, February 3, 2009.

Laquatra, J. and M. Pierce. Green living and energy efficiency. Cornell Cooperative Extension/Steuben County, Hammondsport, NY, March 20, 2009.

Laquatra, J. Eliminating asthma triggers and lead poisoning hazards in homes. U.S. Department of Housing and Urban Development *Healthy Homes for Healthy Kids Campaign*, San Diego, CA; April 21 –22, 2009.

Laquatra, J. High performance housing. Cayuga County Energy Fair, Auburn, NY, April 25, 2009.

Laquatra, J. *Essentials for Healthy Homes Practitioners*. East Greenbush, NY, May 19 – 20, 2009; Rochester, NY September 9 – 10, 2009; Birmingham, AL: September 14 – 15, 2009.

Laquatra, J. Building a framework for healthy housing. National Healthy Homes Conference, Orlando, FL; April 29 – May 1, 2009.

Laquatra, J. Special topics in residential energy efficiency. Inservice Education Program for members of the Family Economics and Resource Management Program Work Team of Cornell Cooperative Extension. Ithaca, NY: June 3, 2009.

Laquatra, J. Healthy homes training. Inservice education for personnel of St. Lawrence County Health Department. Ogdensburg, NY: June 23, 2009.

Laquatra, J. Healthy homes training. Inservice education for personnel of St. Lawrence County Health Department. Canton, NY: June 24, 2009.

Laquatra, J. *et al.* Green jobs and home performance. Energy Town Meeting via wide area network. Broadcast from Ithaca to remote locations throughout New York State. June 25, 2009.

Laquatra, J. and M. Pierce. *Energy Efficiency and Climate Change*. 4-H Career Explorations. Ithaca NY: June 30 – July 2, 2009.

Pierce, M. *Methods for Reducing Energy Costs in Your Home*. College of Human Ecology support staff workers (Cheer). January 13, 2009. Rushmore Room, MVR Hall, Cornell University, Ithaca, NY.

Pierce, M. *How to Build High Performance Homes*. Homebuilders Association of the Finger Lakes (Chemung & Steuben Counties) January 16, Big Flats, NY.

Pierce, M. *Reducing Energy Consumption in New and Existing Houses*. Green Living Workshop sponsored by Cornell Cooperative Extension of Putnam County February 7, 2009. Carmel, NY.

Pierce, M. *Goals and Reporting Requirements of Extension Associations Participating in the 2009 Consumer Education Program for Residential Energy Efficiency (CEPREE)* CEPREE In-service held via Cornell University wide area distance learning network. February, 17, 2009.

Pierce, M. *Current Research and Outreach Efforts at Department of Design & Environmental Analysis*. Orientation for volunteers held at Cornell Cooperative Extension of Tompkins County. March 17, 2009. Ithaca, NY.

Pierce, M. *Reducing Heating Costs in Existing Home*. Sustainable Steuben: The Green Gala, the annual public meeting for Cornell Cooperative Extension of Steuben County. March 20, 2009. Hammondsport, NY.

Pierce, M. *Identifying Architectural Styles of Older Homes* Four-hour continuing education class for Rockland County Board of Realtors. May 6, 2009. Pearl River, NY

Pierce, M. *Architectural Styles of New York's Older Homes – An Introduction* Family Economic & Financial Management Educators In-service, held in Ithaca, NY, Tuesday June 2, 2009.

Tompkins County Energy Conservation Corp

Mark Pierce held several training classes to teach Cornell students volunteering to visit houses across Tompkins County and do basic energy audits for the homeowners:

1. *Basics of Building Science Training Workshop*, June 4, 2009 Workshop held at Cornell Cooperative Extension of Tompkins County
2. *How Home Energy Audits are Done*, June 5, 2009
3. *Demonstration and class on how to Use a blower door and measure a house to collect data for a home energy audit* June 19,2009, Caroline, NY
4. *Entry of collected data into energy audit software and producing energy reports*. June 19, Cornell Cooperative Extension of Tompkins County, Ithaca, NY.

Pierce, M. *How to Build Super Insulated Super Energy Efficient Homes* Home Builders Association of the Fingerlakes (Chemung & Steuben Counties). June 30, 2009. Big Flats, NY

Pierce, M. *Mold in Residential Structures: What Realtors Need to Know*. Four-hour continuing education class for Rockland County Board of Realtors. May 6, 2009. Pearl River, NY

Pierce, M. *How to Build an ENERGY STAR Home*. Board of Directors and volunteers of the Habitat for Humanity of Tompkins & Cortland County. July 7, 2009. Lansing, NY.

Pierce, M. *Residential Indoor Air Quality*. Continuing education workshop for Rockland County Board of Realtors. July 29, 2009. Pearl River, NY

Pierce, M. *Mold, Moisture & Ventilation Issues in Homes*. Staff training for Tompkins County community Action Agency Staff- Home-site Visitors. August 19, 2009. Ithaca, NY.

Pierce, M. *Building Envelope Basics*. Presentation to the general public at Cornell Solar Home Exhibit at the New York State Fair. September 3, 2008. Syracuse, NY

Pierce, M. *Building Envelope Basics*. Presentation to the general public at Cornell Solar Home Exhibit at the New York State Fair. September 4, 2008. Syracuse, NY

Pierce, M. *Weatherizing Windows in Older Home*. Presentation/workshop for the general public at Cornell Cooperative Extension of Tompkins County. September 16, 2009.

Pierce, M. *Identifying Architectural Styles of Older Homes*. Four-hour continuing education class for Rockland County Board of Realtors. October 14, 2009. Pearl River, NY

Pierce, M. *Reducing Heating Costs in Existing homes* Presentation at Wayne County Energy Fair sponsored by Cornell Cooperative Extension of Wayne County. October 24, Newark, NY.

Pierce, M. *Lead Safe Work Practices for Remodelers and do-it-Yourselfers*. Workshop held at Significant Elements Architectural Salvage warehouse, Ithaca, NY. November 10, 2009.

Outreach Activities

Extension/Outreach focus is on practical applications of research foci.

Ongoing projects:

- Laquatra, J. Principal Investigator, Consumer Education Program for Residential Energy Efficiency. Funding source: New York State Energy Research and Development Authority.
- Laquatra, J. Principal Investigator, Healthy Homes. Funding source: Cooperative State Research, Education and Extension Service and the U.S. Department of Housing and Urban Development.
- Laquatra, J. Trainer, Reducing Asthma Triggers and Lead Poisoning Hazards in Homes. Funding source: U.S. Department of Housing and Urban Development.
- Laquatra, J. Principal Investigator, Sprawl and Residential Preferences: Investigating and Building Educational Strategies on New Understandings of Land Use. Funding source: Cornell University Agricultural Experiment Station and Cornell Cooperative Extension.
- Laquatra, J. Principal Investigator, Improving Household and Community Financial Security Through CCE Money and Energy Management Education, Funding Source: Smith-Lever (competitive).
- Laquatra, J. Principal Investigator, Energy Efficiency and Indoor Environmental Quality, Funding Source: Smith-Lever (competitive).

Biographical Listing

J. Laquatra. *Who's Who in America*, 2009.

J. Laquatra. *Who's Who in the World*, 2009.

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