



# Lehigh Valley Research Consortium Newsletter

Winter 2010

## Message from the Director

Dear Community Member:

It's time again to reflect upon the State of the Lehigh Valley. This year, for the first time, we are launching our third *State of the Lehigh Valley, Community Trends at a Glance*, at a public event, which is co-hosted with Renew LV. The event will take place on Thursday, January 13th at Lehigh University from 11:30-1:30 pm. This event will not only showcase the results of our review of the LV, but also provide an opportunity to hear from regional experts about community issues and it will provide ample time for a larger discussion of attendees. Lunch will be provided in the \$10 registration fee. Contact Steven Bliss at <http://www.renewlv.org> for more information. The report will be available on our website in January.

In addition to preparing this report, faculty and students are engaged in several community-focused research projects including a study of gambling in the Lehigh Valley and a community health study highlighted here. We continue to expand our community-based information system, which houses over 300 indicators of community well-being from 2003 to the most recent data available.

Seasons Greetings,

Michele Moser Deegan, Ph.D.  
Director, Lehigh Valley Research Consortium  
Associate Professor Muhlenberg College

## Faculty Spotlight Dr. Robert Root

Dr. Robert G. Root is an Associate Professor of Mathematics at Lafayette College and serves on the LVRC Executive Board. Dr. Root is an applied mathematician and a teacher of mathematics and statistics. He specializes in physiological models incorporating differential equations, numerical analysis, statistics and image processing and has published numerous peer reviewed articles about the kinematics and dynamics of swimming fish. These mathematical and statistical models are useful in a variety of biological and biomimetic inquiries. He teaches courses in Calculus, differential equations, statistics, and mathematical modeling, and a seminar for first year students entitled, "The Mathematics of Social Justice."



Dr. Root is also interested in engaging in community-based research to teach statistics more effectively, and service-learning to convey the importance of quantitative literacy for active and informed citizenship. Most recently, Dr. Root's introductory statistics class has worked with the Easton Area Community Center. The class designed, implemented, and analyzed a survey of the children and parents served by the Center's after-school program. He has also worked on projects for the United Way of the Greater Lehigh Valley and the Easton Area School District. Dr. Root received his Ph.D. from the University of Delaware. Dr. Root can be reached at [robroot@lafayette.edu](mailto:robroot@lafayette.edu).

## High School Literacy Intervention and Mentoring Program

Pre-service teachers enrolled in Moravian College's Curriculum and Instruction in English course this fall examined student literacy achievement data from Bethlehem's Liberty High School and decided they needed to do something tangible to help close the gap between the school's top and bottom performers. Responding to research literature suggesting the importance of early high school intervention and secondary school student ownership and choice, the Moravian seniors in the course formed three intervention teams to design new curricula and mentor students in three of Liberty's ninth and tenth grade Critical Literacy classes.

Moravian College associate professor of education Dr. Joseph Shosh and Liberty High School English teachers Stephanie Corrigan, Sara Fiske, and Alison Tannous supported the pre-service teachers in the development of engaging lessons in alignment with Pennsylvania's literacy standards to improve student achievement. The pre-service teachers also applied for and received a grant from the Moravian College Leadership Center to purchase young adult fiction titles that the high school students selected based on Book Talks the college seniors conducted during the early fall. Post baccalaureate English certification candidate and chair of the project Jeffrey Opp, explains, "We hope that literature dealing with social issues will inspire students to make a difference, especially in traditionally under-served communities. As Moravian pre-student teachers, we have entered the field hoping to inspire our students, to make a positive difference in their lives, and to help make social changes to improve our communities." For more information about this course contact Dr. Joseph Shosh at [shosh@moravian.edu](mailto:shosh@moravian.edu).

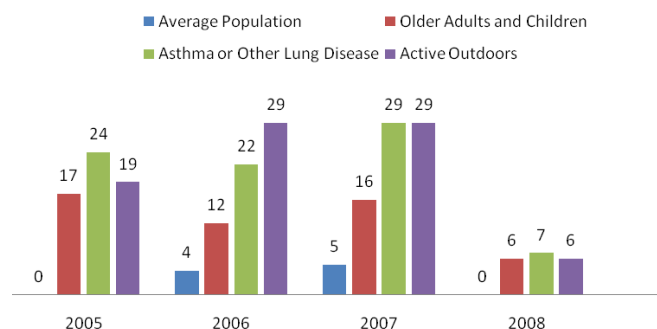
## Community-Based Information System

The LVRC's Community-Based Information System is a constantly expanding resource for anyone interested in the Lehigh Valley. While we continue to expand our current community indicators with additional years of data, we are also focusing on adding new community indicators. Our goal is to assemble data from 2000 through 2009 this year.

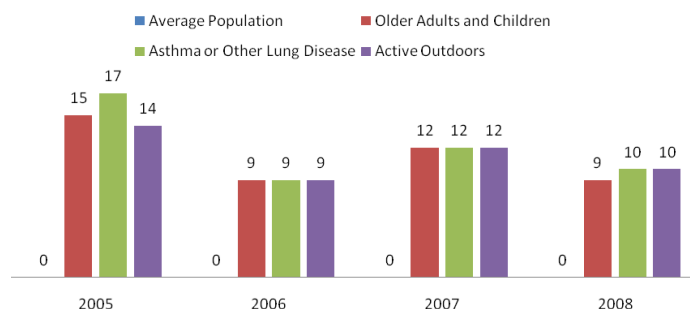
We have also used our "State of the Lehigh Valley Report" to expand the data we collect. For example, in the past we have used children living below the poverty level as a graphic display of the public health of the Lehigh Valley. This year we have begun to incorporate that data into our community-based information system as an additional community indicator.

The largest expansion of our data collection this year is displayed in our environmental section, which will be highlighted in this year's "State of the Lehigh Valley Report." In addition to the collection of ozone exceedent days we have begun to assemble sulfur dioxide and particulate matter from the EPA air measurement sites in our area. All three pollutants are considered principal pollutants and have serious potential health effects, primarily causing respiratory problems. These pollutants are especially damaging to sensitive populations including, children, the elderly, and asthmatics. We have also begun to collect the number of unhealthy air quality days to  
*(continued on page 3)*

**Unhealthy Air Quality Days for Selected Populations - Northampton County**



**Unhealthy Air Quality Days For Selected Populations - Lehigh County**



# Current Research

## Gambling Behaviors and Perceptions in the Lehigh Valley

With the help of the Muhlenberg College Institute of public opinion, the LVRC is once again surveying residents of the Lehigh Valley to ask about their gambling behaviors and perceptions of gambling. This is the third time we have conducted the study; we surveyed residents before the Sands casino opened in 2007; after the casino opened in the Winter of 2009; and we are now in the field. In addition to this bi-annual survey, the LVRC has contracted with the Northampton County Drug and Alcohol Division to complete a Problem Gambling Needs Assessment. The Assessment will comply with the requirements of the PA Department of Health Bureau of Drug and Alcohol Programs (the Bureau).

The goals of the Assessment are to profile population needs, resources and readiness to address needs and gaps in service. In addition, as required by the Bureau, the Assessment will identify the existing problem gambling prevention infrastructure in Northampton County and assess the readiness and leadership to implement policies, programs and practices. The basic element of our research design involves survey research of target populations and an analysis of relevant data collected by various county and sample municipalities. The LVRC research team also will collect and analyze relevant data from county and municipal sources that would inform the county of problems that could be related to gambling. The study is expected to be completed by February 2011. For more information about the research contact Dr. Michele Moser Deegan at [deegan@muhlenberg.edu](mailto:deegan@muhlenberg.edu) or Scott Hoke at [SAhoke@cedarcrest.edu](mailto:SAhoke@cedarcrest.edu).

## Community Health Assessment

Under the Project Directorship of Lanethea Mathews, Muhlenberg College, and Judy Lasker, Lehigh University, the LVRC is conducting a Community Health Study under the auspices of the St. Luke's Hospital Network. The goals of the Community Health Study are to first, identify the primary health issues facing the Lehigh Valley Community and, second, to better understand citizens' perceptions of the most significant health issues facing our communities.

The study includes three primary stages: 1) collection and analysis of existing local, state, and national data sources; 2) widespread dissemination of a community health survey of commence in January 2011; and 3) a series of focus groups. For more information contact Dr. Lanethea Mathews at [mathews@muhlenberg.edu](mailto:mathews@muhlenberg.edu).

## Community-Based Information System - continued

highlight the seriousness of the pollution problems. This data shows not only the unhealthy days for the general population, but also addresses the number of unhealthy days for the more sensitive populations addressed above.

For more information contact Racheal Sell at [rms207@lehigh.edu](mailto:rms207@lehigh.edu). Pollutant explanation found from Pennsylvania Bureau of Air Quality <http://www.dep.state.pa.us/dep/deputate/airwaste/aq/default.htm>

## Mission Statement

The Lehigh Valley Research Consortium (LVRC) combines the expertise of researchers from institutions of higher education and community partners in the Lehigh Valley to examine various issues (eg., political, economic, social, health and environmental) in a regional context.

Through its efforts the LVRC functions as a community based information resource for Lehigh Valley governments, not-for-profits, businesses, and citizens.

The LVRC operates within the administration of the Lehigh Valley Association of Independent Colleges.

For more information about LVAIC, visit [www.lvaic.org](http://www.lvaic.org).

## LVAIC Colleges & Universities

Cedar Crest College	<a href="http://www.cedarcrest.edu">www.cedarcrest.edu</a>
DeSales University	<a href="http://www.desales.edu">www.desales.edu</a>
Lafayette College	<a href="http://www.lafayette.edu">www.lafayette.edu</a>
Lehigh University	<a href="http://www.lehigh.edu">www.lehigh.edu</a>
Moravian College	<a href="http://www.moravian.edu">www.moravian.edu</a>
Muhlenberg College	<a href="http://www.muhlenberg.edu">www.muhlenberg.edu</a>
Lehigh Carbon Community College	<a href="http://www.lccc.edu">www.lccc.edu</a>
Northampton Community College	<a href="http://www.northampton.edu">www.northampton.edu</a>



For more information on the LVRC visit [www.lehighvalleyresearch.org](http://www.lehighvalleyresearch.org).

*You are invited to attend*  
State of the Lehigh Valley: Community Trends at a Glance  
Thursday, January 13, 2011 11:30 a.m. to 1:30 p.m.  
Iacocca Hall at Lehigh University's Mountaintop Campus  
Co-hosted by the LVRC and RenewLV.

Contact RenewLV at [www.renewlv.org](http://www.renewlv.org) to RSVP

Return Service Requested

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