

## **The Second Active Living Research Conference: Signs of Maturity**

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and Leslie S. Linton**

This special issue highlights some of the papers presented at the second annual Active Living Research (ALR) Conference in February 2005. Each represents an important building block in developing a comprehensive knowledge base concerning environmental and policy influences on physical activity. In the summer of 2000 when the Robert Wood Johnson Foundation (RWJF) Board of Trustees approved the concept paper for what would become Active Living Research, none of us could have imagined how quickly this evidence base would emerge. The program staff of RWJF was charged with developing grantmaking strategies that would lead to better approaches to increase population physical activity levels. The 1996 Surgeon General's report on physical activity had clearly demonstrated the health benefits of exercise, yet health educators, exercise physiologists, and others had shown limited impact in significantly increasing the number of people engaging in even moderate levels of physical activity.<sup>1</sup> RWJF was eager to stimulate substantial improvements in a behavior that had such potential for improving the health of all Americans, as they had with smoking. Physical activity was determined to be an appropriate and worthy target.

Much has been written about using ecological models to promote health behavior change, and the benefits of targeting environmental and policy solutions to change population level behavior are generally accepted.<sup>2-7</sup> However, few foundations have invested in developing and evaluating these types of interventions. RWJF has been unique in its understanding of environmental action strategies and its willingness to support policy research to inform those approaches. (See RWJF initiatives such as A Matter of Degree, Reducing Underage Drinking Through Coalitions, Smokeless States and the Substance Abuse Policy Research Program, for example.) As the first step in creating a social change strategy designed to increase population physical activity levels, Active Living Research was funded to investigate which environments and what policies would have the greatest potential to impact physical activity. Initial studies focused on developing and validating measures of the built environment for use in establishing a systematic evidence base. Measurement studies were followed by correlational studies to help determine the relationships between the environment and physical activity levels. Some of the papers in this special issue report on these initial measurement and correlation studies.

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Since that initial RWJF trustee decision, significant momentum for understanding and creating health promoting environments has emerged. In the fall of 2003, both the *American Journal of Public Health* and the *American Journal of Health Promotion* published special issues focusing on the built environment and its impact on human health.<sup>8,9</sup> That was followed by the first National Institute of Environmental Health Sciences (NIEHS) meeting (May, 2004) focusing on Obesity and the Built Environment and the subsequent release of a call for research proposals to investigate the built environment's impact on obesity. The US Task Force on Community Preventive Services has found enough evidence to include urban design and land use policies and practice as recommended strategies by the Centers for Disease Control and Prevention (CDC)'s Community Guide.<sup>10</sup> A 2005 Transportation Research Board and Institute of Medicine (TRB-IOM) report found evidence to support relationships among transportation, land use, and health and called for prospective studies to further examine the cause and effect of such connections.<sup>11</sup> Similarly, the IOM report on childhood obesity called for multi-level interventions that include improving the built environment and community design for children. Much attention has been given to the built environment since the summer of 2000.<sup>12</sup> The number of researchers interested in the field has increased, new and diverse professional partnerships have developed, and exciting new public health practices are being implemented in communities across the country.

Interest in the ALR program and the annual conference is a small indication of how these issues have moved up in concern and stature. In 2004, we turned away so many potential conference attendees that we were forced to move the 2005 conference to a larger hotel. In 2004, we had 144 participants, increasing to 187 in 2005. In 2005, we had over 70 abstracts submitted for the conference and have seen a constant increase in interest from new applicants with each call for proposals. These are exciting times for those interested in environmental and policy approaches for promoting healthy behaviors.

All of the research conceived of and supported by ALR is designed to inform action and create change. ALR studies can inform how to intervene in neighborhoods and institutions with policies that create more health promoting environments for all. Many of the papers reported in this special issue target the fundamental issue of measurement. Creating and validating audit tools, ensuring reliability of instruments, creating protocols or standards for using technology, and providing empirically sound operational definitions are all part of the essential building blocks necessary to create a comprehensive evidence base that can be compared across studies to accumulate knowledge. Funding measurement development studies was the initial priority of ALR, and this issue contains some of the first reports about this new generation of measures of environments and physical activity within specific environments. These papers describe some of the fundamental tools necessary to create evidence to inform action. Ewing and colleagues took on the difficult task of operationalizing concepts used by urban designers to characterize built environments.<sup>13</sup> The definitions they developed can be used to measure qualities of urban spaces and to teach urban design principles. Forsyth and team contribute guidelines for developing and documenting Geographic Information System (GIS) measures of the built environment that can be standardized across research teams.<sup>14</sup> Saelens et al. report a systematic process for developing and evaluating a comprehensive observational measure of parks and playgrounds.<sup>15</sup> Bedimo-Rung and her team

present another observational measure of park characteristics.<sup>16</sup> The tool developed by Troped and colleagues contributes the first detailed assessment of characteristics of trails, which are common settings for physical activity.<sup>17</sup> The McKenzie et al. paper extends a line of observational physical activity measures to obtain detailed assessments of physical activity within parks and the characteristics of the people using the parks.<sup>18</sup> Not only have these authors applied rigorous methods of measurement development and evaluation, but they have shown creativity in naming their measures. Readers can discover what is measured by BRAT, EAPRS, PEAT, and SOPARC.

Other papers in this special issue quantify the associations between particular aspects of the environment (i.e., recreation facilities, schools, neighborhoods) and different types of physical activity. Understanding unique neighborhood characteristics and how they are related to different types of activity is another important building block for creating evidence that can be used to develop interventions and propose policies that change the way communities are designed. Based on an empirical study funded by the Centers for Disease Control and Prevention, Moudon and colleagues identify a dozen measurable attributes of walkable neighborhoods and propose threshold measures of walkability corresponding to amounts of walking recommended for health.<sup>19</sup> In the Lindsey, Han, and Wilson paper, we learn what type of neighborhood characteristics are related to increased trail use.<sup>20</sup> The Cohen et al. paper examines school location and its relationship to adolescent girls' activity levels.<sup>21</sup> Norman et al. further examine adolescent activity levels and how they correlate with community design features, such as parks and recreation facilities.<sup>22</sup> In the Lee and Moudon paper, walking for transport and walking for recreation are examined separately to determine if different environmental features are more related to one type of walking than to the other.<sup>23</sup> Collectively, these papers start to outline a set of specific environmental design features that guide planners, developers, and recreational professionals as they attempt to increase activity levels in youth and adults. In her commentary, Susan Hanson, who chaired the TRB-IOM working group, summarized the key findings and recommendations of that report and discusses how the studies in this supplement advance the field. Dr. Hanson also analyzes some of the similarities and differences across studies and frankly points out some of the continuing limitations of research in this field.<sup>24</sup>

Ultimately, policy solutions are necessary to create environments that can help sustain behavior change. The Schmid, Pratt, and Witmer paper points out that public health policy around physical activity remains poorly defined and undeveloped.<sup>25</sup> The policy papers in this special issue begin to address that charge, with Schmid et al. proposing a framework for identifying physical activity related policies.<sup>25</sup> Taylor and colleagues make the case that disparities in the distribution of healthy community design features may help explain the higher obesity rates observed in low income, minority communities.<sup>26</sup> They suggest that this unfair distribution is similar to the unequal distribution of landfills that sparked the environmental justice movement and should be considered a social justice issue. The Andreyeva and Sturm paper reports differences in health care costs for active and inactive middle age Americans.<sup>27</sup> Understanding the costs associated with individual behavior, and who pays for it, is necessary for promoting action and catalyzing change. Heath et al. report the results of a systematic review of urban design, land use, and transport policies. Their evaluation of the impact of these policies on physical activity levels identi-

fies sufficient evidence to recommend effective community-scale and street-scale urban design and land use policies.<sup>10</sup> An important goal of Active Living Research is to formulate a policy agenda that is informed by the research, to create an understanding of which features of the environment are most likely to support physical activity for different populations, and to identify which processes are effective at implementing both the environmental and policy changes necessary to create health promoting places. This goal was addressed at the conference by a panel discussion of policy makers and advocates. They discussed how research could be made more relevant to policy makers and communicated more effectively. Some of the main themes of this panel are summarized in an engaging article by Barbara McCann.<sup>28</sup>

Another goal of Active Living Research is to provide resources that will benefit research, policy, and practice. Several resources on [www.activelivingresearch.org](http://www.activelivingresearch.org) are of particular relevance to readers of this journal supplement. All the papers in this supplement to *Journal of Physical Activity and Health* can be freely accessed. Most of the measurement instruments described in papers in this supplement are available for downloading from the website. The slides from all the oral presentations are available, courtesy of the authors. Finally, DVDs are available of the policy makers panel and the keynote address by Mario Noriega who described the extensive and rapid construction of pedestrian, cycling, and mass transit infrastructure as well as innovative policy changes to promote physical activity that have been accomplished in the city of Bogotá, Colombia.<sup>29</sup>

The papers in this journal and many other publications are helping to fill in the blanks in our evidence and further define the types of changes our community efforts should be focused on. We know much more now than we did in the summer of 2000.

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