reassuring, though, that women are well represented among the recipients of awards that are specifically geared towards young scholars, such as the Geoffrey J.D. Hewings Junior Scholar Award, the Epainos Award, and the Ben Stevens Fellowship (Table 3). These patterns suggest that much of women's under-representation may be a generational issue.

Now that we see an increasing number of women who can function as role models, the process of women participating and excelling in the discipline may accelerate. Some of us who have been with regional science for many years have engaged in activities geared towards retaining women. Maureen Kilkenny has, for several years now, organized the 'Women's Happy Hour' during the North American meetings. During the 1990s, the North American meetings also featured the Early Bird Sessions that served as an excellent vehicle to give exposure to young scholars - male and female. And the Europeans have done an excellent job with their Epainos sessions at the ERSA meetings where young scholars, among them a large number of women, present their work. Moreover, many disciplines now have a much more gender-balanced undergraduate and graduate student population than in the past. Recruiting women into regional science will thus become easier over time.

If the female under-representation is indeed a generational phenomenon, then it has a good chance of disappearing with the younger generations. Being involved in regional science for almost a quarter of a century now, I have seen enormous changes since Baltimore 1987. The membership became so much more diverse – at least with respect to gender composition. I am curious to see the effects of this increased diversity. Will it affect the culture of 'doing business' in regional science? Will it have an impact on the

substantive issues being researched by regional scientists? My gut feeling is that it already has and that the field as a whole has benefited tremendously.

Too bad that I will most likely not witness those changes in the 100<sup>th</sup> anniversary issue of Papers in Regional Science. My prediction is that women will make up about one third of the membership: after all, self-selection is very powerful and is likely to persist, i.e., even in the 2050s, women's self-selection into regional science will be weaker than their selfselection into, for example, art history. Maybe the Association can begin tracking members by age and sex so that we can monitor compositional changes more accurately. I also predict that women will have a strong impact on the topics being researched; if the papers presented at the last North American meetings (Brooklyn 2008) are any indication, then women will be a driving force in people-oriented research centered on migration and immigration, transportation, and health.

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## Meet the Fellows: Karen Polenske

Karen Polenske is Professor of Regional



Political Economy and Planning at the Department of Urban Studies and Planning from the Massachusetts Institute of Technology. Some of us have wondered why more U.S. and European women are not attracted to the sciences and engineering as well as economics, regional science, and other disciplines that require mathematics.

Encouragement to do mathematics (and statistics) is needed early from parents and teachers while girls are still in grade school and high school. Often young girls are discouraged from taking it beyond the required subjects, although the use of the computer may be changing this. I never gave much thought as to taking or not taking mathematics when I was in high school. I enjoyed maths and also enjoyed teaching other students about how to do the problem sets.

In high school, when I took geometry, I was the only girl out of about 200 in my class who was still attending the mathematics class. I was planning to be an extension agent, and my teachers could not understand why I wanted to learn maths. In graduate school, I was part of the first class in the economics department at Harvard University where we had the option of taking either a language or a mathematics examination. Until then, graduates were only required to pass the language examination. I took the maths option.

Look at the early issues (before 1960) of The American Economic Review, and you will find that articles were mostly devoid of equations, and authors used tables only to review historical or current data descriptively. Times have changed. Mathematics is now a regular part of most economic and regional science articles. Also many women attend the regional science meetings. Most do not realize how few women attended the early meetings. I remember one meeting in Chicago many years ago where Anna Nagurney and I were the only women in a group of over 100 men. Now, many women attend the annual meetings, and we have a get-together each year at the

meetings, so that we become much better acquainted with one another (see Maureen Kilkenny's article below).

I definitely think that having more women attend the meetings, becoming Fellows of the Regional Science Association International, and playing an active role in the Regional Science Association is a move in the right direction. I am not as sanguine about the current emphasis on mathematics and econometrics, partly because I see too many articles where the authors do not understand the underlying economic concerns – their focus on the econometrics often obscures the importance of the underlying issues.



## 6. Centres of Regional Science: Regional Science at Tsukuba



Professor Yoshiro Higano is currently the Executive Director of the Pacific Regional Science Conference

Organization (PRSCO) of the Regional Science Association International (RSAI). In 2011 he will begin a two year period of Presidency of RSAI. In this article we introduce him and his research institute in Japan.

Professor Higano was born in Nagano Prefecture, Japan. He received a PhD in Environmental Science from Hokkaido University. He is now Professor of Environmental Policy, and leads the Doctoral Program in Sustainable Environmental Studies in the Graduate School of Life and Environmental Sciences, University of Tsukuba. He has been a member of the Doctoral Examination Committee of Free