Response to the Report of the Review Committee of the Statistical Genetics Interdisciplinary Graduate Certificate

Elizabeth Thompson,
on behalf of the Statistical Genetics Steering Committee

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1) Summary:

The Statistical Genetics faculty are most grateful to the Review Committee for their very helpful and constructive report. We acknowledge the need for the Certificate Program to have a more clearly defined role and existence separate from the Statistical Genetics Ph.D pathways in Statistics and Biostatistics. To this end, we have taken some immediate actions, as detailed sections 2 and 3.

With the modest programmatic support recommended by the Review Committee, the Statistical Genetics faculty are enthusiastic about the opportunities for developing and expanding the Certificate Program. As detailed in (4) below, we can build on the foundation of the high-quality instruction provided by our current dedicated faculty, to meet the new challenges in this rapidly evolving field, and provide a program that meets the training needs of many more, and more diverse, UW graduate students.

2) Actions already taken include:

(a) Formation of a Steering Committee: We have replaced the Advisory Board of the Certificate Program with a Steering Committee consisting initially of the five senior faculty of the program who taught core courses of the Certificate Program in 2006-7 (Thompson, Weir, Wijsman, Green and Felsenstein). We recognize the need to hand on to "the next generation" of Statistical Genetics faculty, but feel that this core senior leadership is the most effective way to "jump-start" program development. A student representative will be added to the Committee.

(b) Meetings of the Steering Committee: The Steering Committee has met once, and has scheduled a regular meeting for the first teaching Tuesday of every quarter. Immediate concerns of the Steering Committee and more generally of the Statistical Genetics faculty are detailed in (3) below.

(c) Identification and enrollment of Certificate Students: Eight students, who completed the core course sequence STAT/BIOST 550-1-2 in 2006 or in 2007 but have not yet completed the full curriculum, have been queried as to their desire to be enrolled in the Certificate Program. In future years, students who register for the capstone 552 course who have not yet specified their intentions will be queried.

3) Plans and future actions:

(a) Expansion of the faculty roster: The Steering Committee decided on immediate expansion of the faculty roster for Statistical Genetics. We will immediately invite six faculty to join us. These faculty are not primarily (bio)statisticians, but they have been involved in statistical genetics and genomics research and may mentor or advise students in Statistical Genetics. They will bring both breadth and depth to the program. Additional expansion may follow: see (c) below.

(b) The new NIH-funded Statistical-Genetics Training grant: Although not directly related to the Certificate Program, it is here relevant and my pleasure to announce the funding by NIH of a new Statistical Genetics Ph.D. student training grant. The Director is Professor Weir (Biostatistics) with co-directors Thompson (Statistics) and Nickerson (Genome Sciences). The six faculty in 3(a) above are all training faculty on this grant. Together with continued Statistical Genetics participation in the Genome Training Grant (Director: Stan Fields, Genome Sciences),

these two funded grants provide a core and focus for continued development of graduate training in Statistical Genetics.

(c) Faculty meeting and Statistical Genetics one-day retreat: In connection with his recruitment, Professor Bruce Weir received funding for a one-day retreat for Statistical Genetics. This retreat is now planned for late-November/early December 2007. This retreat will serve a broader group of faculty, and will feature also invited outside speakers and student participation. However, it will also provide an opportunity for a full meeting of the Statistical Genetics faculty to discuss a variety of issues concerning the program, including addition of other faculty members, and also curriculum.

(d) Curriculum review: We recognize the need for a thorough review of the Certificate curriculum, with the possibility of more flexible course requirements for Certificate completion, and the addition of new courses in other emerging areas of statistical genetics and genomics. The faculty retreat will provide a forum for initiating curriculum discussion with full participation of Statistical Genetics faculty.

(e) The web site: We recognize the need for the Statistical Genetics web-site to be reorganized, in order to better promote the Certificate Program, to provide the Program with a distinct identity separate from (yet closely connected to) other Statistical Genetics graduate training at UW, and to explain the diversity of our Statistical Genetics activities and student opportunities.

4) Future development of the Certificate Program:

(a) The need for Programmatic Support:

As discussed in our Self-Study document, and by the Review Committee, the Certificate Program is at a crossroads. Without programmatic support, it will remain a small component of the Statistical Genetics research and education offered by our outstanding Statistical Genetics faculty. With even modest support, as recommended by the Review Committee (3.3 (a) and (b)), we have the opportunity to build on our success.

(b) Admissions and tracking of students:

If the Certificate Program is to grow, and attract a wider variety of students including graduate non-matriculated students, a more formal admissions procedure is required. Programmatic support is needed for administration of admissions and for tracking of students as recommended by the Review Report.

(c) Evolution of faculty and curricula:

Our Statistical Genetics faculty is growing and evolving, particularly with the new NIH-funded Statistical Genetics Training Grant (see 3(b) above). There are new and emerging areas in which these faculty can provide exciting and challenging new courses. As the program grows, it will be possible to develop more flexible curriculum opportunities for students, while still maintaining the current highly regarded courses.

(d) Visibility, advertising, and program growth:

We would welcome the opportunity for the Certificate Program is to grow, and be more aggressively advertised as a stand-alone program, distinct from (yet remaining in partnership with) other Statistical Genetics training opportunities at UW.