We are pleased to announce the appointment of Fiona Heath as the Survey Research Centre Manager. Fiona has a undergraduate degree in communications (Queen’s) and a master's in environmental studies from York. Most recently, she has worked as a freelance writer and educator on environmental issues and voluntary simplicity while staying home with her son. She works three afternoons a week at the SRC, and is located in Room 6144 in the Math Computer building. Her extension is 5071, e-mail: fjheath@icarus.math.uwaterloo.ca

Spring Term Graduate Courses in Survey Methodology and Survey Analysis

The SRC will offer two courses in the Spring 2003 Term, one under the auspices of the Department of Sociology and the other mounted within the Department of Statistics and Actuarial Science. Both courses are open to Master’s and Ph.D. students from all backgrounds, so long as they have some preparation in social science methodology/ statistics at least at the undergraduate level.

UW-SRC Website: www.src.uwaterloo.ca

SOC 697, Practicum in Survey Administration. The course deals with the question design and fieldwork issues around conducting social surveys, and is ideal for students about to undertake thesis research involving survey data collection. Students can, for example, use the course to design and pre-test their own survey instrument. A survey in the planning stage by the Survey Research Centre is used as a running example and forum for additional practical experience. The most recent developments in the survey methodology literature are examined.

STAT 890, Statistical Issues in Sample Survey Design and Analysis. While SOC 697 is about how to make a survey, STAT 890 deals with how to get results from a survey. Sample design is covered, from simple random sampling up to the more complex designs used in most Statistics Canada surveys. SAS is the main software package used in the course, making a good opportunity for SPSS-reared students to enlarge their data-analytic skills. STAT 890 is ideal for students interested in
using, for their thesis or dissertation, master files for Statistics Canada data sets housed in the Southwestern Ontario Research Data Centre (located at the University of Waterloo).

Both courses are expressly designed to be inter-disciplinary and to cater to a variety of backgrounds. If you are interested, but feel unsure about your level of preparation, contact the instructors (details below). It may be helpful to suggest some preparatory reading.

The courses can both be taken on an audit, credit (i.e., pass/fail) or graded basis. Contact the instructors for further information:

SOC 697, John Goyder, Department of Sociology, e-mail jgoyder@watarts.uwaterloo.ca, telephone 519-888-4567, ex 2643

STAT 890, Mary Thompson, Department of Statistics and Actuarial Science, e-mail methomps@icarus.math.uwaterloo.ca, telephone 519-888-4567, ex 5543.

Southwestern Ontario Research Data Centre (SWORDC) News

**SWORDC Mini-Conference, 2003**

Last year, the SWORDC held its first Mini-Conference, at the University of Guelph. This is an occasion for researchers to present their ideas to an informed but informal, supportive audience.

This year’s conference will be held at the University of Western Ontario, on Friday, April 25th. Room 9420, Social Science Centre, beginning at 9:30 am. As with last year’s conference, there will be a session devoted to work at the proposal-formation stage, giving an opportunity to get feedback on projects and forewarning of possible problems which might arise at the SSHRC review stage. This year will feature a plenary address by David Bellhouse, of the UWO Department of Statistics. See the SWORDC webpage for further details, and contact John Goyder if you would like to present either an RDC proposal or a report on work in progress.

**Longitudinal Analysis for the Un-Initiated**

This will be a one-afternoon introductory session pitched to graduate students from all social science disciplines. Thursday, February 27th, 2003, PAS 2030, 3:30-5:00, at UW.

Open to all comers. No fee nor registration.
See Speakers and Seminars section at the back of the newsletter for further details.

**SWORDC Website: [www.rdc.uwaterloo.ca](http://www.rdc.uwaterloo.ca)**

**SWORDC and Research Grants**

SWORDC is currently funded largely from contributions from the participating universities. From the outset, it has been hoped that researchers applying for grant money for projects involving access to the SWORDC would write in budget lines for support of the Centre. These would be voluntary contributions; there is no standing entry charge to SWORDC, but without the growth of such contributions one might worry about the long-term viability of SWORDC.
The SWORDC yearly budget is over $100,000. The appropriate contribution would obviously depend greatly on the scope of the project. On a small project an amount in the region of $500 would still have useful symbolic value and would help entrench an ethic of SWORDC support by users. On a program in the $100,000 vicinity, with the activity centred on data analysis of Statistics Canada data, a contribution of around $5,000 might be appropriate. For NSERC, health and other non-SSHRC applications, SWORDC support would pose no issue. The situation for SSHRC applications could be a little more complicated, given that SSHRC is providing some direct funding (currently around $25K) to each of the RDCs across Canada, including ours. However, in such applications it would be appropriate to add a budget line for “statistical consulting”, since it is inevitably the case that considerable assistance from the Statistics Canada Analyst on-site would be required to mount and manage the very complex data bases, and to provide advice on advanced analysis procedures.

Contributions will be noted as to the credit of the researcher’s institutional home.

Report from the RDC Analyst

By Pat Newcombe-Welch

As the SWORDC welcomes new projects in 2003, researchers in various disciplines are increasingly rising to the challenge presented by the fact that the standard significance testing procedures available in popular software packages such as SAS and SPSS generally do not correctly estimate the variance for the complex sampling designs used by Statistics Canada. Programs which ignore the complex design tend to underestimate the variance and thus produce p-values which are smaller than they should be, sometimes resulting in incorrectly declaring a result to be statistically significant. One advantage of conducting research at an RDC is that along with the master data files, Statistics Canada also provides the information necessary to calculate variances which correctly take into account the complex survey design. A re-sampling method for variance estimation, known as bootstrapping, may now be used for the National Population Health Survey (NPHS), the Survey of Labour and Income Dynamics (SLID) and for the National Longitudinal Survey of Children and Youth (NLSCY). SAS macros are provided to implement the bootstrapping procedure in order to estimate the bootstrap variance estimates for totals, ratios (which include means), differences in ratios, linear regression coefficients and logistic regression coefficients. Knowledge of SAS on the researcher’s part is required, but the RDC analysts provide as much support as possible to help with the implementation of the macros. Currently, macros are available in SPSS only for the NPHS. It has been interesting to see how the use of the bootstrap variance estimation has changed the conclusions in two studies to date.

Data acquisitions: The employer portion of the Workplace and Employment Survey (WES) is now available in the RDCs, in addition to the employee portion which was made available earlier. WES is the only business survey which is currently allowed to be housed in the RDCs due to the confidentiality concerns associated with business data. The WES file has geographical variables suppressed in order to protect confidentiality. The availability of this additional segment of WES has generated research proposals from the field of psychology, where strong interest lies in linking the employee and employer portions of the survey. Earlier this year, the Canadian Community Health Survey (CCHS) was placed in the RDCs, along with the Youth in Transition Survey (YITS). This term we have had NLSCY researchers Tim Siefert and Henry Schultz visiting from the Faculty of Education, Memorial University. Other projects actively under way are those of Beth Potter (UWO) using the National Population Health Survey; John Goyder (UW) using the Survey of Labour and Income Dynamics; Zenaida Ravanera and Rajulton Fernanda (UWO) using the National Survey of Giving, Volunteering and Participating (NSGVP) and Yigou Sun (UG) using the SLID, amongst
others. Several new projects will commence in the near future.

**Kitchener-Waterloo Metropolitan Area Survey, Spring 2003**

On a periodic basis, the University of Waterloo Survey Research Centre mounts the Kitchener-Waterloo Metropolitan Area Survey (KWMAS), an omnibus survey covering the local region. The first KWMAS took place in 1998, using mailed questionnaires, and the year 2000 edition was conducted by personal interview. The KWMAS now being planned for spring 2003 will use (funds permitting) telephone/RDD contact.

All researchers in the area are welcome to purchase space on the KWMAS, on a first-come, first-served basis. We already have some commitments for the 2003 project. The cost is approximately $2,000 per page ($1,000 per half page, etc.), for a set of questions in 12 point font, reasonably spaced. A set of basic socio-demographic variables is collected in support of all sub-projects. For an exact quotation, send draft questions to Fiona Heath, SRC Manager, c/o Dept. of Statistics and Actuarial Science, MC building (UW campus). Final fieldwork plans will depend on resources available, but we will aim for between 350 and 400 cases, with priority on maximizing response rate over sample size.

It is often possible to carry questions on behalf of graduate students, on a barter basis in which no cash changes hands, but instead the student donates labour to the survey on tasks such as coding or file preparation. In the past, several theses ranging from Honours B.A. level up to doctoral dissertations have been based wholly or partially on data from the KWMAS.

The KWMAS is ideal as an advanced, inexpensive pre-test for a module of questions eventually to be posed in a survey of the national or some other larger population. It is, of course, also well-adapted to issues with a local emphasis such as topics with an urban planning theme or to matters where the local region gives particular demographic leverage (e.g., as a natural laboratory for the New Economy, for work on the local ethnic profile, etc.). The KWMAS is also an excellent outlet for survey methodological research, and each edition of the study so far has included fieldwork experiments of one kind or another. For bibliographies of research on the 1998 and 2000 KWMAS surveys, consult the SRC website at [www.src.uwaterloo.ca](http://www.src.uwaterloo.ca).

Researchers interested in having questions included in the 2003 KWMAS should contact Fiona Heath as soon as possible, so as to allow time for integration of modules, CATI programming of the instrument, ethical review and pre-testing.

**Contact details:**

Fiona Heath, SRC Manager, University of Waterloo
519-888-4567, ex 5071;
fjheath@icarus.uwaterloo.ca

**SRC and SWORDC Speakers and Seminars**

**Held in Fall 2002:**

On Thursday November 14th, Doug Manuel visited UW, jointly sponsored by the SRC and CBRPE (Centre for Behavioural Research and Program Evaluation). Doug is a researcher with ICES- the Institute for Clinical Evaluative Sciences in Toronto. He is also an adjunct professor with the Department of Public Health Sciences, University of Toronto. The talk began with discussion of the data bases researchers at ICES work with. The Registered Persons Data Base takes OHIP card information supplied by the Ontario Ministry of Health and links to various other sources including the National Population Health Survey. Doug then discussed different types of health indicators,
noting that global or ecological measures have more value than some would grant. He argued for an approach which considers both the prevalence of risk factors, the level of each risk and how responsive to intervention each risk is.

The week of December 9th was busy. On Monday the 9th, Professor J.N.K. Rao of Carleton University gave a workshop on Small Area Estimation: Methods and Applications. The event was co-sponsored by the UW Department of Statistics and Actuarial Science, the UW Survey Research Centre and the Southwestern Ontario Research Data Centre. The workshop dealt with basic principles of small area estimation with attention to empirical and hierarchal Bayesian approaches. Illustrations were drawn from disease mapping and from time series cross sectional data.

On Thursday the 12th, Adam Wronski and Heather Lathe did a presentation on the Survey of Labour and Income Dynamics (SLID) for users of the Southwestern Ontario Research Data Centre. Both with the Income Statistics Division of Statistics Canada, the speakers gave a very complete outline of SLID, the survey within the Statistics Canada ensemble of longitudinal surveys concerned with issues around family, income and the labour force. The talk included a demonstration of SLIDRET, software which helps users extract working sub-files from the master file.

Upcoming Events

Longitudinal Analysis for the Un-Initiated, presented by: John Goyder and Keith Warriner, Co-Directors, Southwestern Ontario Research Data Centre, with M.E. Thompson, Department of Statistics and Actuarial Science, acting as Resource Person.
Thursday, February 27th, 2003, PAS 2030, 3:30-5:00

A Short Bibliography of Sources on Survey Design

In response to the occasional query about books on survey design, the following is a brief bibliography. To get into this list, a work has to be fairly accessible from libraries and be devoted mainly to the topic of survey question design. Thus, while most social science methods undergraduate textbooks have a chapter on question design, the present list excludes these. Related themes such as cognitive interviewing will be handled separately, another time. Journal articles are not included, since works such as Foddy, below, give their own more extended guides to periodical literature on survey design.

Arranged by ascending year.


A classic source, although more recent works see more science and less art in question design.


A good source on attitude-scaling methods, an approach given less attention in more recent works.

This important study from 1981 was re-published by Sage in 1996. It is unique for its systematic application of experimental method to question-design issues. Schuman and Presser don’t tell the reader what to do, as other books may, but instead explore the consequence of one wording or another.


A very thorough modern classic. Another book by the same pair, Bradburn and Sudman, *Improving Interview Method and Questionnaire Design* (Jossey-Bass, 1979) is also of interest, but is more a research monograph and less a guide-book for question design.


This useful little volume is part of the famous set of Sage “green books” on methodological issues.


This more modern work gets more into applications of psychological knowledge to survey question-framing than do earlier books. Highly recommended.


This is the new edition of Dillman’s “TDM” (total design method) book from 1978, maybe the best-known of all works in this field. It’s about more than just how to word surveys, but Dillman’s material on question wording and formatting is superb, and amounts to a stand-alone manual. Highly recommended, for people setting out to design their own survey. See the *SRC Newsletter* of Winter, 2002 for a review.


This well-known source has been around for several decades, in various editions. Miller’s approach is to gather together questions (usually aggregated into indexes and scales) used in past research.