



Full-time Analyst:
Patient-engaged Health Research and Novel Clinical Trials
with the Scleroderma Patient-centered Intervention Network and
Individual Participant Data Meta-analysis with the DEPRESSion
Screening Data Projects

Dr. Brett Thombs (www.thombsresearchteam.ca/) and Dr. Andrea Benedetti (<https://www.mcgill.ca/epi-biostat-occh/andrea-benedetti>) of McGill University and the Scleroderma Patient-centered Intervention Network (SPIN; www.spinsclero.com) and the DEPRESSD project (www.depressd.ca) are seeking an analyst to contribute to observational studies and novel trials of patient-centered interventions in a rare disease context and to work with our individual participant data meta-analysis (IPDMA) project on mental health screening.

The Scleroderma Patient-centered Intervention Network (SPIN): Scleroderma is a rare autoimmune connective tissue disease that causes significant disability and disfigurement. SPIN was created to bring together people living with scleroderma, health professionals, and scleroderma researchers from around the world to develop, test, and disseminate accessible support tools for people with scleroderma, including self-management, rehabilitation, psychological, and educational tools. SPIN has addressed barriers to research by (1) fostering a high level of patient and community engagement in all aspects of its research; (2) adapting well-tested patient support strategies from other chronic diseases to meet the needs of people with scleroderma and delivering them via the internet to increase accessibility; and (3) utilizing novel trial designs to conduct large, efficient, trials in a resource-starved rare disease environment. SPIN maintains a large cohort of over 1,600 scleroderma patients, recruited by scleroderma clinicians from 50 clinical sites in 7 countries (Canada, USA, UK, France, Spain, Australia, Mexico). Through the cohort, patients complete regular online questionnaires about psychological aspects of living with scleroderma, important challenges they face, and what their support needs are. SPIN uses this data to develop specific online tools and help people manage and cope with the disease.

The DEPRESSion Screening Data (DEPRESSD) Project (<https://www.depressd.ca>) is a collaborative endeavor that was set up by Drs. Brett Thombs and Andrea Benedetti, who partnered with international experts to evaluate the diagnostic accuracy of depression screening tools by conducting individual participant data meta-analyses (IPDMAs). To date, the DEPRESSD Project has been funded by 17 CIHR grants and includes over 350 investigators from 59 countries, with numbers growing as more data are accrued. The DEPRESSD databases represent a highly novel and valuable resource, which has led to important outputs. In the past few years, the team has published important IPDMAs on (1) screening tool accuracy; (2) statistical methods in IPDMA; and (3) other methodological studies that advance work on screening questionnaires and their application.

Both teams regularly publish their work in the top international medical journals (e.g., Lancet Rheumatology, BMJ, JAMA).

Role of the Analyst:

- Acting as the data custodian for the large SPIN database, including for local trainees and staff, as well as external collaborators requesting data for additional studies;
- Exporting data from the SPIN platform and merging participant data from regular assessments and specific trials;
- Preparing SPIN data for use in specific projects, based on existing codebooks and study protocols;
- Conducting data analyses, including descriptive statistics and generalized linear models, accounting for participant clustering and missing data with SPIN and IPDMA analyses;
- Designing, programming and running simulation studies to address biostatistical methodologic objective with DEPRESSD;
- Contributing to drafting manuscripts for publication (particularly methods and results sections).

The ideal candidate will meet the following qualifications:

- A Master's degree in Biostatistics, Epidemiology, Public Health, Quantitative Psychology or any other field focused on data management and quantitative analysis
- Strong analytical skills
- Research experience, including data management
- Good interpersonal skills and a strong capacity for teamwork
- Basic programming skills (e.g., SPSS, R)
- Excellent organizational and communication skills

Opportunities: Trainees and employees with Dr. Thombs and Dr. Benedetti take on significant responsibility and have published extensively. In the last 5 years, student and staff trainees under their joint supervision have first-authored over 70 peer-reviewed articles and have co-authored articles more than 150 times (for details, see <https://www.thombsresearchteam.ca/>).

Salary and Duration: Salary to be negotiated based on relevant experience and training. This is a one-year position with the possibility of extension based on mutual agreement and funding.

Location: The SPIN team has offices at the Jewish General Hospital and at McGill University, Montréal, Québec. Remote work is also possible.

Start Date: Start date is flexible, and applications will be considered on a rolling basis.

To apply: Applicants should send (1) a cover letter, (2) a curriculum vitae, (3) an unofficial transcript, (4) a writing sample, and (5) contact information for three references to Ms. Marie-Eve Carrier (carrier.marie.eve@gmail.com).