1. Host Department or Agency

1.1. Name of the government host department or agency: Innovation, Science and Economic Development Canada

1.2. Location of fellowship: Ottawa

2. Description of Proposed Science Policy Project

2.1. Project Title
Data Analyst/Scientist

2.2. Project Description
ISED’s Results and Delivery Unit (RDU) is looking for a data scientist/data analyst who would be working as part of small team tasked with identify targets, metrics and benchmarks for measuring results under Canada’s Inclusive Innovation Agenda.

The role of the Data Analyst/Scientist combines experimentation with new data sources and methods, and application to answer ‘burning’ policy questions. It will suit somebody who combines academic rigour, curiosity, and flexibility with a willingness to learn and ‘get their hands dirty’ with data to answer difficult questions, and a desire to impact innovation and economic policy decisions, for the benefit of all.

The successful candidate will assist in the development of a data management tool to help create a centralized repository of common data, with linkages within the Department, as well as with Portfolio organizations and with other federal organizations to inform ISED’s results and delivery work; help establish data strategies for key activities across each area of action under the Innovation Agenda; work with external vendors on a proof of concept for demonstrating the use case for big data analytics by bringing together data from multiple sources, exploring and combining data analysis tools and techniques with machine learning capabilities to create new valuable and usable insights for results-based reporting.

2.3. Policy Activities
The RDU is responsible for leading the development and implementation of ISED and its Portfolio results and delivery work in response to the government-wide approach to results and delivery. This includes establishing targets, identifying indicators to track performance against the targets, evaluating past and present performance grounded in sound data, plan and drive for delivery, and report on progress.

The Unit works closely with the Privy Council Office and other central agencies, other departments, and organizations outside of government both domestic and international. It is responsible for establishing best practices for effective results, reporting and delivery; act as
the departmental and Portfolio lead, internally and externally, for the strategic development of policy responses and strategies, and coordination of all matters related to results and delivery of the Government's Innovation Agenda. It also advises the Ministers, Deputy Ministers (DM), and other senior departmental officials as needed on departmental success in achieving results and of appropriate intervention strategies.

2.4. **Required Expertise**

The ideal candidate will have/be:

- Postgraduate qualification in a relevant field (e.g. data science, data analytics, machine learning, quantitative economics, operations research, statistics, management studies etc.). Candidates with a strong i.e. 1st class, quantitatively-oriented degree at the Bachelor’s level in a relevant subject will also be considered if they have relevant professional experience.

- Strong quantitative data processing and analysis skills, including experience in leading large-scale data management and data architecture projects.

- Knowledge of data analysis software, and data science relevant programming languages such as Python, R and/or D3.js, as well as general purpose programming languages such as Java, Ruby or JavaScript, and database and big data processing techniques.

- We are also interested in candidates with research experience in the science, technology and innovation area, including knowledge of the relevant innovation studies and economics literature, and experience working with business and scientometrics datasets.

- Possess a strong business acumen, coupled with the ability to communicate findings, including a proven ability to translate between technical and non-technical language and present research findings in ways that are clear, compelling and credible, and to draft high-quality outputs from research.