

**Opportunity Title:** Crowd modelling in post-event emergency situations

**Opportunity Reference Code:** IC-18-46

**Organization** Office of the Director of National Intelligence (ODNI)

**Reference Code** IC-18-46

**How to Apply** **Create and release your Profile on Zintellect** – Postdoctoral applicants must create an account and complete a profile in the on-line application system. **Please note: your resume/CV may not exceed 2 pages.**

**Complete your application** – Enter the rest of the information required for the IC Postdoc Program Research Opportunity. The application itself contains detailed instructions for each one of these components: availability, citizenship, transcripts, dissertation abstract, publication and presentation plan, and information about your Research Advisor co-applicant.

Additional information about the IC Postdoctoral Research Fellowship Program is available on the program website located at: <https://orau.org/icpostdoc/>.

If you have questions, send an email to [ICPostdoc@orau.org](mailto:ICPostdoc@orau.org). Please include the reference code for this opportunity in your email.

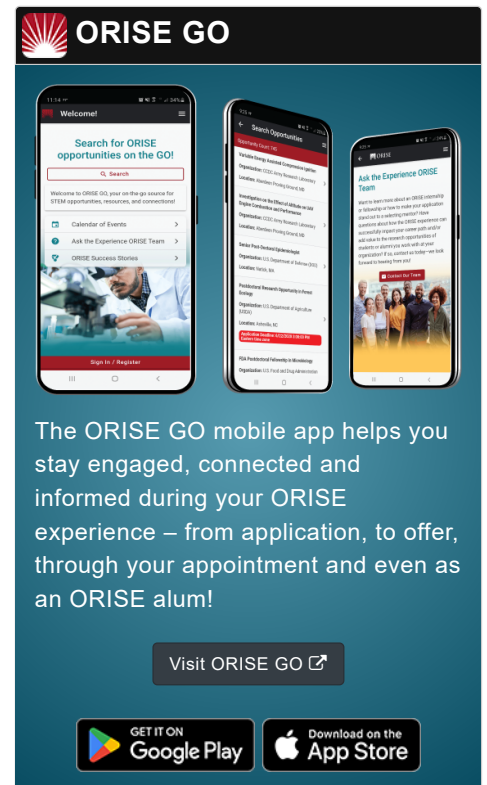
**Application Deadline** 3/12/2018 11:59:00 PM Eastern Time Zone

**Description** **Research Topic Description, including Problem Statement:**

Terrorist incidents are thankfully rare, and there is limited evidence from real events to provide emergency services with reliable information on how the public will react in the immediate aftermath of a significant event such as the detonation of an IED. With the rapid development of smartphone technology, social media, and changing attitudes towards beliefs, frontline services and infrastructure planners need an easy and rapid means of investigating the likely outcomes of a variety of emergency situations including fires, explosions, pre-emptive evacuations and other events. This knowledge can be invaluable to ensure effective management of post-event situations, minimize further casualties, streamline evacuation and recovery procedures and allow effective design of infrastructure to be designed with this in mind.

#### Example Approaches:

- Small scale experimental case studies of previous emergency events, controlled experiments, or fundamental psychological/social studies into expected behavior.
- Development of agent-based, flow-based or other forms of



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computational modelling based on empirical data.

- Validation of created or existing models against real data.

*Note: No Human Subject Research is authorized for the IC Postdoctoral Research Fellowship Program.*

## Qualifications

### Postdoc Eligibility

- U.S. citizens only
- Ph.D. in a relevant field must be completed before beginning the appointment and within five years of the application deadline
- Proposal must be associated with an accredited U.S. university, college, or U.S. government laboratory
- Eligible candidates may only receive one award from the IC Postdoctoral Research Fellowship Program.

### Research Advisor Eligibility

- Must be an employee of an accredited U.S. university, college or U.S. government laboratory
- Are not required to be U.S. citizens

## Eligibility Requirements

- **Citizenship:** U.S. Citizen Only
- **Degree:** Doctoral Degree.
- **Discipline(s):**
  - **Chemistry and Materials Sciences** (12 )
  - **Communications and Graphics Design** (6 )
  - **Computer, Information, and Data Sciences** (16 )
  - **Earth and Geosciences** (21 )
  - **Engineering** (27 )
  - **Environmental and Marine Sciences** (14 )
  - **Life Health and Medical Sciences** (45 )
  - **Mathematics and Statistics** (10 )
  - **Other Non-Science & Engineering** (5 )
  - **Physics** (16 )
  - **Science & Engineering-related** (1 )
  - **Social and Behavioral Sciences** (28 )