

Mathematics of Gun Violence: Schedule

Wednesday, May 1

8:00am – 9:00am Breakfast available

9:00am – 9:45am Introduction of workshop objectives and participants

9:45am – 10:45am Presentation 1: Sherry Towers, **Arizona State University**, “*Contagion in mass killings and school shootings*”

10:45am – 11:00am Coffee break

11:00am – 12:00pm Presentation 2: George Mohler, **Indiana University – Purdue University**

Indianapolis, “*Spatial ranking, embedding, and interventions for heterogeneous human activity data*”

12:00pm – 12:05pm Group photo

12:05pm – 1:00pm Lunch

1:00pm – 2:00pm Presentation 3: Rosanna Smart, **RAND Corporation**, “*Approaches to modeling effects of state gun policy: Methodological considerations*”

2:00pm – 3:00pm Breakout sessions 1 – 3

3:00pm – 3:30pm Coffee break and session reports

3:30pm – 5:00pm Breakout sessions 4 – 6

5:00pm – 5:30pm Session reports and summary

5:30pm Reception and poster presentations

Thursday, May 2

8:00am – 9:00am Breakfast available

9:00am – 10:30am Breakout sessions 1 – 3

10:30am – 11:00am Coffee break and session reports

11:00am – 12:00pm Breakout sessions 4 – 6

12:00pm – 12:30pm Session reports and breakout topic evaluations

12:30pm – 1:30pm Lunch

1:30pm – 3:00pm Breakout sessions 7 – 9

3:00pm – 3:30pm Coffee break and session reports

3:30pm – 5:00pm Breakout sessions 7 – 9

5:00pm – 5:30pm Session reports and summary

5:00pm Dismiss for dinner

Friday, May 3

8:00am – 9:00am Breakfast available

9:00am – 10:00am Organization of report and consensus on topics to include

10:00am – 10:30am Break

10:30am – 11:30am Synthesis sessions for each report session

11:30am – 12:00pm Final wrap up

12:00pm Dismiss for travel

Breakout Session Topics

1. Network models accounting for individual and group characteristics
2. Investigating the spatio-temporal aspects, including the environment, of gun violence models
3. Incorporating and testing theoretical models from criminology, sociology, and epidemiology to explain gun violence
4. Developing epidemiological criminology as an emerging paradigm for gun violence modeling
5. Best practices for collaborating with stakeholders not just in developing models but in communicating results effectively and translating results into actionable recommendations
6. Methods for appropriate data gathering and quality to provide background information for models

Alternative Topics

Based on Survey Results

- Approaches for modeling the impacts of legislative policies
- Modeling methods to ascertain the impacts of alternative intervention methods
- Incorporating demographics into behavioral models for gun violence
- Incorporating new technologies into models of gun violence
- Methods for quantifying the impact of policies targeting rare events