## Abstract 5.

Short-term mental health outcomes among individuals enrolled at the emergency department after physical assault

Caroline Taheri<sup>1,2</sup>, Natalie Ziemba<sup>1,2</sup>, Christopher Jones<sup>3</sup>, Chris Agala<sup>1,2</sup>, April Soward<sup>1,2</sup>, Stacey House<sup>4</sup>, Francesca Beaudoin<sup>5</sup>, Christopher Lewandowski<sup>6</sup>, Phyllis Hendry<sup>7</sup>, Paul Musey<sup>8</sup>, Ronald Kessler<sup>9</sup>, Karestan C. Koenen<sup>10</sup>, Kerry Ressler<sup>11</sup>, Samuel McLean<sup>1,2,12</sup> for the AURORA Study Investigators

From the <sup>1</sup>Institute for Trauma Recovery; <sup>2</sup>Department of Anesthesiology, University of North Carolina, Chapel Hill, NC; <sup>3</sup>Cooper University Health Care, Camden, NJ; <sup>4</sup>Department of Emergency Medicine, Washington University, St. Louis, MO; <sup>5</sup>Department of Emergency Medicine, Alpert Medical School of Brown University, Providence, RI; <sup>6</sup>Henry Ford Health System, Detroit, MI; <sup>7</sup>University of Florida Health/Shands Jacksonville Hospital, Jacksonville, FL; <sup>8</sup>Indiana University Health, Indianapolis, IN; <sup>9</sup>Department of Health Care Policy, Harvard Medical School, Boston, MA; <sup>10</sup>Department of Epidemiology, Harvard School of Public Health, Boston, MA; <sup>11</sup>Department of Psychiatry, McLean Hospital, Boston, MA; <sup>12</sup>Department of Emergency Medicine, University of North Carolina, Chapel Hill, NC

**Background:** Physical assault (PA) survivors commonly present to the emergency department (ED) for care. The prevalence and outcome trajectories of posttraumatic stress (PTS), depressive, and pain symptoms in this common trauma population have not previously been clearly defined.

**Methods:** Individuals presenting to an AURORA Network ED within 72 hours of PA were enrolled. Baseline demographic information was obtained in the ED; patient outcome assessments included three-month survey. Substantial PTS, depressive, and pain symptoms were defined via PTSD Checklist (PCL-5)  $\geq$ 28, PROMIS-8b depression scale  $\geq$ 60, and Numeric Pain Rating scale  $\geq$ 4, respectively.

**Results:** Individuals experiencing PA (n=173, 89/173(51%) men) were enrolled, including individuals who had intentionally started or joined a fight/brawl (n=26, 15%), been attacked or jumped (n=133, 77%) or had experienced another type of PA (n=14, 8%). High rates of substantial depressive (52/173(34%)), PTS (74/173 43%), and pain (75/173, 43%) symptoms were reported three months after PA. After adjusting for age and sex, individuals who had been attacked or jumped had not significantly different depressive (OR=0.12, p=0.49), PTS (OR=0.15, p=0.47), and pain symptoms (OR=0.25, p=0.34) at three months as individuals who had intentionally started or joined a fight or brawl. Women had higher rates of pain (OR=3.47, p=0.001) than men, and individuals experiencing PA between ages 18-29 had lower rates of pain (OR=2.14, p=0.014) and PTS (OR=1.98, p=0.015) symptoms than individuals age 50 or older.

**Conclusions:** PA survivors frequently experience substantial depressive, PTS, and pain symptoms after assault. Further studies are needed to compare risk factors after PA vs. other types of trauma.

## Funding source: R01AR0664700

Keywords: AURORA Study, trauma, physical assault, adverse neuropsychiatric sequelae