**CCI Biostatistics Expertise**

|  | Experience = ✓ Specialty = ★ | Olesya Baker, PhD | Camden Bay, PhD | Rie Maurer, MA | Guohai (Bruce) Zhou, PhD |
| --- | --- | --- | --- | --- | --- |
| Methods/analyses | Categorical data analysis | ✓ | ★ | ✓ | ✓ |
| Clinical trial design & analysis |  | ✓ | ✓ | ✓ |
| Computational statistics |  | ✓ | ✓ | ★ |
| Database design |  |  | ★ |  |
| Generalized linear models | ✓ | ★ | ✓ | ★ |
| Item Response Theory |  |  |  | ✓ |
| Longitudinal and dependent data | ✓ | ★ | ✓ | ★ |
| Medical imaging |  | ✓ |  |  |
| Missing or mismeasured data | ✓ | ✓ | ✓ | ★ |
| Multivariate data analysis | ✓ | ✓ | ✓ | ✓ |
| Power analysis and design |  | ★ | ★ | ★ |
| Population Health | ★ |  |  | ✓ |
| Quality improvement | ✓ |  | ✓ | ✓ |
| Quasi-experimental research methods (e.g., interrupted time series, instrumental variables, regression discontinuity, difference-in-differences) | ★ |  |  | ★ |
| Randomization |  |  | ★ | ✓ |
| Regression diagnostics | ✓ | ★ | ✓ | ✓ |
| Semiparametric or nonparametric methodology |  | ✓ | ✓ | ✓ |
| Statistical genetics and computational biology |  | ✓ |  | ✓ |
| Survey analysis | ✓ |  | ✓ | ✓ |
| Survival analysis | ✓ | ✓ | ✓ | ✓ |
| Areas of study | Emergency Medicine | ★ |  |  |  |
| Endocrinology |  |  | ✓ |  |
| Epidemiology | ✓ | ★ | ✓ | ✓ |
| Family Medicine |  | ✓ | ✓ |  |
| Gastroenterology |  |  | ★ |  |
| Genetics |  | ✓ |  | ★ |
| Health Policy Research | ★ |  |  | ★ |
| HIV/AIDS |  | ✓ |  | ✓ |
| Infectious Disease |  |  | ✓ |  |
| Medicare | ★ |  |  |  |
| Pain |  |  |  | ✓ |
| Prescription Drug Monitoring Programs (PDMP) | ★ |  |  |  |
| Pulmonary |  |  | ★ | ★ |
| Radiology |  | ★ | ✓ |  |
| Women’s Health |  |  | ★ |  |