Slide 2

Hana is born in Czech Republic, and finished her graduate study and Ph.D in Hamburg, Germany.

She studied in computer science for her master’s degree.

During that time, she worked as a research assistant at statistics department, the research experience motivated her enthusiasm in Statistic,

Therefore, she started to learn computational statistics at her Ph.D. stage, in Helmut Schmidt University.

After that, she came to UW and became a postdoctoral fellow in Statistics department.

Slide 3

Hana is one of the first statisticians to do research on demographic statistics. She has been working in this area for eight years, resulting in various publications, **including a paper co-authored with professor Raftery, “Bayesian Probabilistic Population Projections for all countries” in 2012**. In the paper, they introduced their new dynamic projection model. Compared to the traditional population projection model, the probabilistic model developed by Hana and her group **takes into account uncertainty about fertility, mortality and migration pattern, which is more precisely in control of the projection uncertainty.**

In last year, Hana and her group came out with a more sophisticated model that can be utilized into subnational-level of population prediction, which she said is much more challenge than projections in country level.

Their population projection model has been widely accepted. The United Nations official population projection in 2015 based in part on their models. Since then, Hana and her group have been collaborating with the UN in optimization of the projection model and developing R packages.

You can find amazing graphs and outcomes on the website of UN population division. All the computation and graphing are based on Hana’s R code in the backstage.

Slide 4

These are the recent publications displayed on her website from 2012 to 2018.

We can see most of her work is on population projection.

**There are also a few publications about urbanization and land-use forecasting, these are part of the work she did in Puget sound regional council.**

Hana’s knowledge on computer programming helps her group implement their statistical methodologies and models into R packages.

She has published on CRAN with R packages of population projections, mortality projection, and snow package**, which all have become part of R core package parallel.**