7 OWN CONTRIBUTION

According to my education I started my scientific work in the laboratory where I was involved as one of the crucial contributors in the critical analysis and establishment of a very sensitive, as automated as possible high-throughput measurement method of relative telomere length in large cohorts with a high level of standardization to ensure a clean, reliable and high quality data base for further epidemiological approaches. After generating all the laboratory data on relative telomere length presented in this thesis (and others for further projects performed in the Division of Genetic Epidemiology), I extended my contribution to the statistical-epidemiological field. I was involved in data management, data control and data analysis. Data analysis was mainly undertaken in cooperation with Ass.-Prof. Barbara Kollerits, PhD. Within the large German Chronic Kidney Disease (GCKD) Study I was able to acquire experience in study quality control processes. In addition I was involved in data collection and management within the Family Heart and Kidney Disease Study (FHKS) and the Chronic Renal Insufficiency Implementation Study (CRISIS). As we recognized differences in our relative telomere length results according to the DNA extraction method in the course of statistical analyses, I was one of the main contributors to a methodological approach concerning relative telomere length measurement and potential epidemiological consequences. Therefore, recorded data were used for a methodological report. Another important contribution was literature search, interpretation of data and writing of manuscripts.