


Focus	Genome sequencing of diverse <i>Drosophila</i> species
PI	Shu Kondo Genetic Resource Center, National Institute of Genetics
Period	FY2014
Overview	<p><i>Drosophilidae</i> is an extremely diverse family of insects, with an estimated 10,000 species distributed all over the world. The most famous member of this family is <i>Drosophila melanogaster</i>. <i>D. melanogaster</i> has a short generation time and is easy to culture, making it the most powerful model system to study genetics in various fields of medical and biological sciences. <i>D. melanogaster</i> was originally endemic to tropical sub-Saharan Africa, which offers a very comfortable environment for animals. In contrast, there are species of <i>Drosophila</i> that have adapted to extreme environments: Some species inhabit subarctic zones while others inhabit desert areas. There are also species that evolved to specialize in toxic food such as poisonous mushrooms. Not a few of these interesting species can be cultured in the laboratory just like <i>D. melanogaster</i>, offering a unique opportunity to study the molecular genetics of a new biological phenomenon. In this project, we will determine the genome sequences of 10 <i>Drosophila</i> species and make the data available to the research community.</p>  <p style="text-align: center;"><i>Drosophila triauraria</i></p>
Progress	<p><i>D. parapallidosa</i>, <i>D. hydei</i>, <i>D. guttifera</i>, <i>D. nasuta</i>, <i>D. lacteicornis</i>, <i>D. subobscura</i>, <i>D. triauraria</i>, <i>D. bifasciata</i>, <i>Chymomyza costata</i>, <i>Scaptomyza elmoj</i>, BioProject ID=PRJDB4817 http://trace.ddbj.nig.ac.jp/BPSearch/bioproject?acc=PRJDB4817 http://www.ncbi.nlm.nih.gov/bioproject/?term=PRJDB4817</p>