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Preface to the Second Koala Retrovirus Workshop Online 25–27 May 2021

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Abstract. In 2013, the first Koala Retrovirus Workshop was held in San Diego, bringing together biology and veterinary specialists to assess and discuss the state of knowledge on koala retrovirus (KoRV) and to form professional bridges and networks. Tremendous progress has been made in the years following the San Diego meeting, in large part due to ongoing international collaborations that were fostered to study KoRV. This volume presents peer-reviewed papers from most of the oral presentations and discussions held during the Second Koala Retrovirus Workshop in 2021. Unfortunately, the COVID-19 pandemic forced the workshop into an online only format. Despite this limitation, three days of discussions based on workshop presentations highlighted current knowledge and important information gaps, culminating in suggested ways forward, all summarized in this volume.

Since characterization of the koala retrovirus (KoRV) in 2000 (Hanger *et al*., 2000) and the discovery that it represents the only accessible model of the process of genome colonization (Tarlinton *et al*., 2006), molecular techniques have advanced to a state where full genomes of koalas and huge numbers of individual koalas in both healthy and diseased states can be examined (Greenwood *et al*., 2018). At the same time, a growing body of research supports association of KoRV with disease manifestations in koalas (Legione *et al*., 2017; Waugh *et al*., 2017; Fabijan *et al*., 2019; Quigley *et al*., 2019; Butcher *et al*., 2020; Saker *et al*., 2020; McEwen *et al*., 2021; Blyton *et al*., 2022). In the 10 years since the first Koala Retrovirus Workshop (2013), enormous strides have been made in understanding KoRV. However, the workshop clearly demonstrated that several knowledge gaps remained which precluded implementation of effective management strategies to support koala conservation efforts. This has become an increasingly urgent need. Koala population decimation following the major fires across much of the koala's Australian range in 2019–2020 highlighted the vulnerability of koala populations, brought about by decades of habitat reduction and fragmentation. As of February 2022, the Australian Government listed the combined koala populations across Queensland, New South Wales, and the Australian Capital Territory as endangered.

During this three-day workshop, invited speakers reviewed historical knowledge and presented recent discoveries in KoRV biology, with topics covering KoRV

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