Welcome to the first edition of the Journal of Local and Global Health Science (LGHS). The journal publishes articles in a wide variety of different fields, such as environmental, educational, toxicological aspects that influence both human health and the health of the ecosystem. The articles do not only describe local conditions and health concerns, but in addition provide the opportunity to consider the global implications of local environmental changes, as well as how global environmental changes affect local communities. We are convinced that understanding the mechanisms through which specific elements or contaminants influence our health and well-being, as well as that of the greater ecosystem, is a key necessity for overcoming these issues.

This first volume of LGHS discusses public health issues as diverse as site contamination and lead neurotoxicity. However, the articles share a concern with examining local environments through a global perspective and understanding how changes in the natural environment influence local and global health.

The first article by Tiffany-Castiglioni et al. provides an excellent analysis of current literature exploring how the use of lead-based kohl may contribute to lead neurotoxicity. In contrast, the contributions from Scrudato et al. and Khwaja et al. are original research articles analyzing the effects of local environmental problems and pollution caused by humans on health outcomes.

These original research articles are followed by several reviews examining different aspects of health that are relevant both locally and globally. Shanmugam et al. explore the impact of changes in day length on health outcomes in northern and southern latitudes, as well as the historical transformations that took place following the introduction of artificial light on melatonin release and the incident of multiple diseases. Florea and Büsselferg examine the global problem of breast cancer and therapy resistance, emphasizing the global aspects of a possible treatment.

The last paper of this volume reviews the effects of the heavy metal “lead” on the nervous system, especially how it effects pre- and post-synaptic mechanisms and, therefore, impairs synaptic transmission. This manuscript aims to make the main interactions understandable to a wider audience utilizing animated figures to explain the impairment of synaptic transmission by lead.

The goal of this journal is to increase knowledge and contribute to a better understanding of the interactions between local and global factors that influence health.

We encourage you to submit your articles for publication in the Journal of Local and Global Health Science.

We welcome original research studies as well as topical reviews and welcome your suggestions and comments.