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CREATING A WAY FORWARD: INTERNATIONAL COOPERATION TO PROMOTE SPACE
WORKFORCE DEVELOPMENT IN DEVELOPING SOCIETIES

Abstract

This paper reports findings of the International Academy of Astronautics (IAA) study group, International Cooperation for Space Life Sciences Knowledge Sharing and Development in Africa, (2014). The study group, comprised of space life sciences experts from across the globe, was established in 2010 and charged with developing a cooperative global strategy to generate and share space life sciences knowledge among space-faring and space-aspiring African nations. The study group's findings highlight the need for global cooperation, including engagement of emerging and established space-faring countries in programs that reflect indigenous societal objectives and support Global Space Exploration policies. Our paper will present these findings, including lessons learned from African involvement and investment in core space activities. Some of the African limitations, which include knowledge gaps and challenging social and economic conditions, are being remedied by increased spending on comprehensive elementary-secondary-undergraduate/graduate space science education programs that target workforce development. In addition this paper will examine implications and potential of existing space based programs to enable and promote community-based space life sciences research, education and development in developing countries in general—particularly through increased international governmental/non-governmental partnerships. The presenters will propose a roadmap for developing space-emerging countries seeking to develop global partnerships to develop indigenous space life sciences programs that meet their respective, indigenous needs. Finally, this paper will describe some of the IAA study group observations that there are many platforms available to promote inter-regional cooperation on space science programs and will calibrate the IAA study group's report with the IAA commissioned report, Future Human Spaceflight: The Need for International Cooperation (2010) which outlines common global interests for human space exploration. The collective wisdom generated by these reports is that a synergistic consortium of space agencies from select developing countries can expand the frontiers of space life sciences research and educational outreach to inspire young people, encourage partnerships among developing societies and promote common ground to establish global partnerships that promote international cooperation and knowledge sharing among developing societies.