

Journal of the WASHINGTON ACADEMY OF SCIENCES



Board of Discipline Editors	ii
Editor's Comments <i>S. Rood</i>	iii
Humans to Mars: Stay Longer, Go Sooner, Prepare Now <i>D. W. Gage</i>	1
A Brief History of Government Policies to Promote Commercial Space <i>B. Lal</i>	25
Estimating the Climate Impact of Transportation Fuels: Moving Beyond Conventional Lifecycle Analysis Towards Integrated Modeling Systems Scenario Analysis <i>M. A. Delucchi</i>	43
The Violinist's Thumb: Stories about Genetics, Retro Diagnosis, and Human Life <i>S. Kean</i>	67
Annual Awards Banquet Photos and 2013 Awards Program	81
In Memoriam - Clifford Lanham (1938-2013)	95
Membership Application	97
Instructions to Authors.....	98
Affiliated Institutions.....	99
Affiliated Societies and Delegates	100