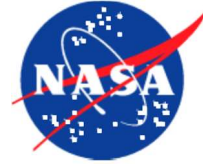


National Aeronautics and
Space Administration



Headquarters
Washington, DC 20546-0001

Reply to
Attn of: SMD/Planetary Science Division

17 January 2017

Dr. Rafik Goubran
Vice-President (Research and International)
Carleton University
1125 Colonel By Drive,
Ottawa, ON K1S 5B6
Canada

Dear Dr. Goubran,

I am writing to commend to your attention the recent extensive participation of Dr. Claire Samson in the evaluation of Concept Study Reports for NASA's Discovery Program. The goal of the Discovery Program is to provide frequent flight opportunities for high quality, high value, focused, planetary science investigations that can be accomplished under a not-to-exceed cost cap (\$450,000,000 in Fiscal Year 2015 dollars for this opportunity). All missions in the program are led by a single scientist, the Principal Investigator, and are selected through a rigorous, two-step peer-evaluation process. Participation in this process is greatly time-consuming but is critically important to maintaining the vitality and quality of NASA's robotic exploration enterprise.

In 2014 NASA issued an Announcement of Opportunity seeking proposals for the next mission in the Discovery Program. Ultimately, five were selected to enter Phase A and develop more detailed designs, called Concept Study Reports (CSRs). From these five, NASA selected two to continue to flight: *Lucy* and *Psyche*. The missions evaluated were: *DAVINCI*, *Lucy*, *NEOCam*, *Psyche*, and *VERITAS*. *DAVINCI* would have studied the chemical composition of Venus' atmosphere during a 63-minute long descent. It would have answered scientific questions that have been considered high priorities for many years. *Lucy* will perform the first reconnaissance of the Jupiter Trojan asteroids — objects that are thought to hold vital clues to deciphering the history of the Solar System. *NEOCam* would have discovered ten times more near-Earth objects (NEOs) than all NEOs discovered to date. It would also have begun to characterize them. *Psyche* will explore the origin of planetary cores by studying the metallic asteroid Psyche, the likely survivor of a violent hit-and-run collision with another object that stripped off the outer, rocky layers of a proto-planet. Finally, *VERITAS* would have produced global, high-resolution topography and imaging of Venus' surface and would have produced the first maps of deformation and global surface composition.

Dr. Samson served as a Science Evaluator, focusing on both Venus geology and asteroid science. She provided essential insights on the *VERITAS* and *Psyche* mission concepts. Her responsibilities were to:

- 1) participate in a multi-hour, kickoff teleconference at which NASA provided instructions on how to evaluate the CSRs and explained the process and criteria to be used in evaluating them;
- 2) review and provide evaluation findings on each CSR (of 1,000 pages in length) for both evaluation criteria: Science Implementation and Technical, Management and Cost Risk;
- 3) participate in two four-hour long teleconferences for each CSR during which all evaluation findings will be discussed and draft reviews written;
- 4) attend the five-day Initial Plenary Meeting in Virginia Beach, VA where the initial evaluations of the CSRs were finalized and a list of questions for each CSR team on the significant issues that were have found were developed; and,
- 6) attend the five-day Final Plenary in San Diego, CA where the Science Implementation evaluations for all five missions were finalized and final adjective grades for this criterion were determined.

Dr. Samson's expertise was crucial to the evaluation of both the *VERITAS* and *Psyche* mission concepts and she participated in the discussions of the other three mission concepts. All in all, she displayed the highest degree of commitment, integrity, and professionalism through the evaluation process.

Sincerely,

A handwritten signature in black ink that reads "Michael H. New". The signature is written in a cursive, flowing style.

Dr. Michael New
Lead Discovery Program Scientist

Cc:
Dr. Matthias Neufang
Dean (Faculty of Graduate and Postdoctoral Affairs)
Carleton University

Dr. Malcolm Butler
Dean (Faculty of Science)
Carleton University