

Hamid Ghandehari, The University of Utah

Salt Lake City, Utah, USA

February 17, 2023

Nominee for Secretary, Controlled Release Society

Vision, Goals and Responsibilities

My experience:

Controlled Release Society (CRS) is the premier society dedicated to the science of delivery of bioactive agents. I have been a member of CRS for over three decades, since 1992, fellow since 2015, have chaired the programming committee of two of the annual meetings in 2012 (Quebec City, Canada) and 2018 (New York City, USA) respectively, was a member of the CRS Scientific Advisory Board from 2014-2017, and member of the editorial board of Journal of Controlled Release, the flagship journal of the Society since 2005. Between 2008 to 2012 I Chaired the inaugural CRS Nanomedicine Focus Group. Throughout the years I have participated in numerous CRS meetings, chaired scientific sessions, organized workshops and my students received several awards at the annual CRS meetings. In my capacity as chair of the annual programming twice and as scientific advisory board member, I have worked closely with the CRS leadership team and staff over the years. As such I am familiar with the innerworkings of the Society.

In addition to organizational interactions with CRS, I have conducted original research in controlled drug delivery for nearly 27 years as an independent investigator culminating in the publication of 225 manuscripts that are cited 16,296 times to date with an *h*-index of 69. From 2006 to 2011 I served as Executive Editor, and from 2012-2022 as Editor in Chief of Advanced Drug Delivery Reviews (ADDR), the flagship review journal in our field with a current impact factor of 17.873. In this capacity I worked closely with the executive editors, guest editors and the publishing team to provide up to date and in depth reviews in a theme issue format for the drug delivery community.

During my career as a faculty I have trained underrepresented minorities, served on university equity, diversity and inclusion (EDI) committees and participated in training programs designed to attract minority and under-privileged students to scientific research. My experiences with CRS, ADDR, significant research in our own lab, administrative duties at the university, and numerous service roles in the drug delivery community qualify me, I believe, for becoming the next Secretary of Controlled Release Society.

Vision for CRS:

Controlled release science thrives at the interface of disciplines; materials science and engineering, chemistry (physical, organic, inorganic), biology (organ, tissue, cellular, subcellular), chemical and biomedical engineering (e.g., mass transfer, drug / device combinations, ...), data science, a sound translational path, and product development and commercialization. In my view the science of delivery can advance in three *fundamental, yet interconnected* ways: 1) Developing novel materials and fabrication techniques, 2) better understanding of biological barriers, and 3) translation of technologies to address new and unmet clinical needs. More than often new ideas for controlled release technologies come from the three fundamental areas, and at the interface new delivery techniques evolve by painstaking and

careful research and in collaborative teams. Importantly, to further realize the full potential of the Society's membership, continued efforts need to be devoted to improve equity, diversity and inclusion.

Goals/Actions:

To realize this vision we must reach out to the CRS membership and related disciplines, both established scientists and young investigators to help bring in novel research ideas to the society. My goals will be:

- 1) To increase the participation of basic scientists with new and relevant discoveries useful for controlled release.
 - a. I will engage membership to provide educational opportunities in the fundamental sciences relevant to controlled release.
 - b. I will work with the CRS officers, chapter leaders, focus groups, division leaders, young scientists committee, journal editors and organizers to help introduce new science relevant to delivery in the community.
 - c. This may be basic findings and technologies in materials science and engineering, fundamental discoveries in biology and pathophysiology that help advance the science of delivery, or introduction of new and unexplored unmet needs that the delivery community can help address.
- 2) To improve the diversity of membership and leadership team in the CRS.
 - a. I will collaborate with Women in Science, EDI committee and other constituents of the CRS to help improve the diversity, equity, and inclusivity of CRS.

Responsibility as Secretary of CRS:

As the secretary of CRS I will work with leadership team and members to ..."oversee the provision of notices of records and meetings, maintain minutes, oversee the election process, maintain the bylaws and the policy and procedure manual, and communicate society activities to the membership." (excerpt from CRS bylaws).

My service experience in ADDR, national and international service contributions, including but not limited to, chairing the US National Institute of Health NANO Study Section from 2018-2020, chairing NIH interdisciplinary nanotechnology grant review panels, serving and chairing the Ireland Science Foundation grant review panels, participating in European Union review panels, participating in large scale collaborative projects in South Korea, visiting scientist in Padova, Italy, Paris, France and Kumamoto, Japan, advising the CRS Indian Chapter, currently chairing a highly successful pharmaceuticals department at the University of Utah, directing a campus-wide nanotechnology training program for nine years, among other national and international service contributions and experiences qualify me to conduct the day-to-day responsibilities of the CRS secretary with its vast and diverse international membership.

Thank you for your time and trust!

Hamid Ghandehari