JSPS US AND CANADA ALUMNI ASSOCIATION SEMINAR PROGRAM **REPORT**

Organizer (Awardee)

Name: Toshihisa Kawai

Position & Affiliation: Chair and Professor, Nova Southeastern University, College of Dental Medicine

1. TITLE OF SEMINAR

Oral and Systemic Health Connection Evidence and Emerging Technologies: Cutting edge technologies in biomedicine

2. DATE(S)

February 17, 2024

3. VENUE & CITY, STATE

NSU Oceanographic Center, 8000 N Ocean Dr, Dania Beach, FL 33004

4. TARGETED RESEARCH AREAS

(1) Raman Spectroscopy(2) Direct reprogramming for(3) Stem Cell Bio-3D Printing
tissue regeneration

5. NUMBERS OF PARTICIPANTS

TOTAL: <u>100 persons including 5 US and Canada Alumni Association members</u>

-US: <u>94 persons</u>

-CANADA: <u>0</u> persons

-FROM OTHER COUNTRIES: 3 person(s) including 3 person(s) from Japan

NOTES FOR REPORT

*Please be sure to include the following contents. (Maximum 5 pages)

-Executive Summary

The AADOCR Florida/JSPS Joint Symposium, titled, "Oral and Systemic Health Connection Evidence and Emerging Technologies: Cutting edge technologies in biomedicine' was organized, as an inaugural event to launch scientific activities of the AADOCR Florida Section, on February 17th at the Nova Southeastern University (NSU) Oceanographic Center, Dania Beach, FL. The symposium was organized by co-chairs, Dr. Kawai, Dr. Han and Dr. Vardar, member volunteers and staff at NSU, College of Dental Medicine. Dr. Preethi Chander, NIDCR Program Director, gave opening remarks punctuated by the announcement of new funding opportunities and programs to support studies focused on the oral-systemic health connection. In the JSPS session, featuring a look at pioneering technologies in biomedicine, four invited speakers from Kyoto Institute of Technology (KIT; Dr. G. Pezzotti, Video message), Okayama U (Dr. S. Takashiba), Hiroshima U (Dr. M. Kajiya), and Kyoto Prefectural University of Medicine (KPMU; Dr. K. Yamamoto) shared the recent discovery and progress on their research in the tissue regenerative technologies and innovations in diagnostic approaches for oral diseases, including, periodontitis. Ms Keiko Kabashima (JSPS Washington) introduced the JSPS overseas research fellowship programs. Information In attendance for AADOCR Florida session, were ten speakers invited from prestigious dental institutions across the country, including UPenn, ADA Forsyth, Harvard, UCSF, University of Louisville, UMich, and SUNY Buffalo. Each speaker provided his/her own insights into the link between periodontal disease and such comorbidities as diabetes, obesity, neurodegenerative disease, and atherosclerosis, as well as other chronic conditions. The highlight of the day came when experts from academia, industry and medicine joined together for an enlightening interactive panel discussion on the challenges and opportunities of dental-medical integration, including constructive recommendations and innovative perspectives. The organizers were proud to include a poster session giving NSU and UF students, including one JSPS alumni member, the opportunity to present their research to participants. The top three presenters, including Dr. S. Nakamura (Postdoc Fellow, NSU), Ms. M. Mendonca (College Sophomore, NSU) and Mr. N. Di Cologna (PhD Grad Student, UF), received awards for their novel finding in research and excellent performance in presentation.

-Topics Discussed with Outcomes & Future Challenges

All talks were very well received by the audience. Over 100 attendees were present, and the symposium received strong positive feedback from speakers and audience alike during and after the meeting. Consensus of the attendees suggests that events like this significantly boost scientific exchange and networking within the JSPS alumni and AADOCR Florida members, greatly contribute to the development of new collaboration and exchange of knowledge in diverse multidisciplinary research fields. In particular, several AADOCR Florida members expressed their interest in the overseas research fellowship program offered by JSPS.

One blemish in this symposium was the fact that we could not broadcast the event online to the JSPS alumni members, due to confidentiality and copyright issues. The clearance of such a legal matter would take a significant amount of time, especially when it involves speakers from multiple different academic institutions and corporate entities. For the future organization of similar symposiums/seminars, it is suggested to take action with sufficient leeway.

-Workshop/Seminar Agenda

JSPS Session outline:

"Cutting edge technologies in biomedicine" moderated by Toshihisa Kawai

- Giuseppe Pezzotti (KIT, Japan) "Raman Spectroscopy in Life Sciences" (Video Presentation)
- Kenta Yamamoto, (KPMU, Japan) "Direct reprogramming for bone regeneration"
- Shogo Takashiba, (Okayama U, Japan) "Gingipain as the Target for Screening of Periodontitis"
- Mickey Kajiya, (Hiroshima U, Japan) "Tissue Regeneration by Stem Cell Bio-3D Printing" "Announcement from JSPS Washington Office"

• Keiko Kabashima (JSPS, Washington, USA) "JSPS Fellowship Information"