

Prosthodontics Research Group

<http://www.iadr-prosthodontics.org/>

International Association for Dental Research

Newsletter

Edited by Cortino Sukotjo and Dan Nathanson (February 2013)

Greetings from the President - Dan Nathanson



Dear Members of the IADR Prosthodontics Research Group,

The 2013 IADR meeting in Seattle will be held next month and it is expected to be a large annual meeting with close to 4000 accepted abstracts. I'm glad to report that our Prosthodontics Research Group has also received a record number of abstracts this year. After the review process, close to 93% of the prosthodontic abstracts were accepted by our program chair and abstract reviewers. Please see the full report from the Program Chair, Dr. Asbjorn Jokstad in this newsletter. Another record was the number of submissions to the Frechette Research Awards competition (details in Dr. Steve

Rosenstiel's report). The Frechette Research Awards completion session will take place on Wednesday, March 20, at 1:30 p.m.-3 p.m. in Room 618, and I hope that all of you will be able to attend. My sincere thanks to Drs. Jokstad and Rosenstiel for the successfully accomplishment of their respective tasks, as well as to the abstracts reviewers for taking the time to review and rate the large number of abstracts.

A few months after the IADR meeting last year I sent as promised a message to all Prosthodontic Program Directors in the US, reminding them of our Prosthodontic Research Section, and requesting to encourage their residents to participate in the meeting as well as the Frechette Research Competition. I also encouraged them to consider designating any submitted abstract to our pros Research Group. Hopefully this may have had an impact and I'm expecting good participation in our oral presentations and poster sessions, as well as our business meeting and cocktail reception. There will be one Symposium, jointly organized by our Prosthodontics Research Group together with the Dental Materials Group, titled: **Performance of Zirconia-Based and Lithium**

Disilicate Glass-Ceramic Dental Restorations (Saturday March 23, at 8 AM, in Ballroom 6C).

As in recent years we will hold our Prosthodontics Research Group Business Meeting on Thursday (March 21) in Room 607 at the Convention Center. We welcome all of you and encourage you to attend the Business Meeting. The meeting will include reports by the section officers, election of new officers, a podium for members who want to make comments or suggestions, and the announcement of the Frechette Research Awards winners. Immediately after the business meetings we will hold our traditional cocktail reception in conjunction with the Implantology Research Group and you are cordially invited to participate. The reception, kindly sponsored by the Panasonic Corporation, is offering food and drinks is free of charge. We offer our sincere gratitude and appreciation to the Panasonic Corporation for their generous sponsorship of the reception.

In closing I want to thank our section officers once again, and particularly Dr. Cortino Sukotjo who has done most of the work in organizing the various technical aspects of our section's projects.

I look forward to seeing you all at the meeting - in our scientific sessions, the members meeting, and the group reception.

With best personal regards,

Sincerely,

Dan Nathanson DMD, MSD
President, Prosthodontics Research Group

Prosthodontics Research Group

Executive Officers 2011 -2012

A. President

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dnathan@bu.edu

B. President-Elect

Wael Att, Albert-Ludwigs University, wael.att@uniklinik-freiburg.de

C. Immediate Past President

Keiichi SASAKI Tohoku University Graduate School of Dentistry, keii@dent.tohoku.ac.jp

D. Program Chair

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E. Secretary/Treasurer

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H. Frechette Award Coordinator

Stephen Rosenstiel The Ohio State University, College of Dentistry ,
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i. Pre-Prosthetic Regenerative Science Award Coordinator

Keiichi SASAKI, Tohoku University Graduate School of Dentistry,
keii@dent.tohoku.ac.jp

J. IADR PG Student Research Fellow- ship Coordinator

Wael Att , Albert-Ludwigs University, wael.att@uniklinik-freiburg.de

K. Directors:

1. **David Bartlett** King's College London Dental Institute at Guy's, King's College and St Thomas' Hospitals. david.bartlett@kcl.ac.uk

2. **Wael Att** Albert-Ludwigs University, wael.att@uniklinik-freiburg.de

3. **Kazuyoshi Baba** Showa University, kazuyoshi@dent.showa-u.ac.jp

4. **Christian Stappert** University of Maryland School of Dentistry,
cstappert@umaryland.edu

Group Program Chair Report 2013 - Asbjorn Jokstad



For the 2013 IADR meeting in Seattle, WA, the prosthodontics research group co-sponsors one hands-on workshop and one symposium. There will be 8 oral sessions, one poster discussion session and 7 poster sessions.

The hands-on workshop is titled **From the Communicating Science to the Public: Telling Your Story Effectively**. Sponsored by: Dental Materials, Education Research, Microbiology/Immunology, Periodontal Research, Prosthodontics Research, Pulp Biology and Regeneration. Organized on Friday, March 22, 2013: 8 a.m.-9:30 a.m. (Room 606)

The symposium is titled: **Performance of Zirconia-Based and Lithium Disilicate Glass-Ceramic Dental Restorations**. Sponsored by: Dental Materials, Prosthodontics Research. Organized on Saturday, March 23, 2013, 8:00 AM - 9:30 AM. (Ballroom 6C)

The IADR head office initially identified approximately 195 abstract as directly related to prosthodontic research. Following some exchanges of abstracts between the various IADR research groups, 193 abstracts were distributed online to Drs Wael Att, Dan Nathanson, Stephen Rosenstiel and Mohammed Zahran for independent critical appraisal in duplicate. Consensus on abstract rejection or inclusion was excellent. There was only need for arbitration by the group program chair of a small proportion of disagreements. All abstract rejections were satisfactory justified and the submitters received constructive criticism of the multiple reasons for the abstract rejection.

In the end, 13 abstracts were rejected yielding a total of 180 abstracts to be presented, of which 48 (30%) are oral and 132 (70%) are poster presentations, including 7 poster discussion presentations.

Based on the abstract contents the 180 abstract have been clustered within different topic headings. Obviously, applying nosology to prosthodontics research domains is a challenge on its own and merging small numbers of abstracts with somewhat diverging research focus under meaningful headings is another. Anyhow, an interesting characteristic this year, which is different from earlier is that as many as 51 abstracts report on clinical interventions. Another interesting detail is that the number of “digital prosthodontics research” was high enough this year to merit an oral session on its own, and together with maxillofacial prosthetics constitute a poster session topic with 18 posters. Eight oral different sessions, 1 oral poster session and 7 poster sessions are scheduled under the topic headings as follows:

Wednesday, March 20, 2013

1. 1:30 p.m.-3 p.m.: Frechette Competition. **Location:** Room 618 **Chair:** S. ROSENSTIEL

2. 3:15 p.m.-4:45 p.m.: Clinical Interventional Studies; Implant-retained Protheses. **Location:** Room 618 **Chair:** J.A. SORENSEN

Thursday, March 21, 2013

3. 8 a.m.-9:30 a.m.: Implant Prosthodontic Laboratory Research. **Location:** Room 618 **Chair:** S. WOLFART
4. 10:45 a.m.-12:15 p.m.: Digital Prosthodontics Research. **Location:** Room 618 **Chair:** W. ATT
5. 2 p.m.-3:15 p.m.: Digital Prosthodontic Research and Maxillofacial Prosthetics. **Location:** Hall 4. **#Abstracts:** 18
6. 3:30 p.m.-4:45 p.m.: Clinical Studies, Edentate Patients. **Location:** Hall 4. **#Abstracts:** 18

Friday, March 22, 2013

7. 8 a.m.-9:30 a.m. Fixed Prosthodontic Laboratory Research. **Location:** Room 618 **Chair:** M. KERN
8. 10:45 a.m.-12:15 p.m.: Clinical Interventional Studies; Fixed Protheses. **Location:** Room 618 **Chair:** S. DOGAN
9. 2 p.m.-3:15 p.m.: Implant Prosthodontic Laboratory Research. **Location:** Hall 4. **#Abstracts:** 19
10. 2 p.m.-3:15 p.m.: Scientific Research in Prosthodontics (**Poster Discussion Session**). **Location:** Room 614 **Chair:** R.G. LUTHARDT. **#Abstracts:** 7
11. 3:30 p.m.-4:45 p.m.: Fixed and Removable Prosthodontic Laboratory Research. **Location:** Hall 4. **#Abstracts:** 17
12. 3:30 p.m.-4:45 p.m.: Prosthodontic Materials Laboratory Research. **Location:** Hall 4. **#Abstracts:** 21

Saturday, March 23, 2013

13. 8 a.m.-9:30 a.m.: Clinical Interventional Studies; Removable Protheses. **Location:** Room 618 **Chair:** M. WALTER
14. 10:45 a.m.-12:15 p.m.: Implant Prosthodontic Biology Research. **Location:** Room 618 **Chair:** W.J. SILVA
15. 2 p.m.-3:15 p.m.: Clinical Studies, Partial Dentate. **Location:** Hall 4. **#Abstracts:** 15
16. 3:30 p.m.-4:45 p.m.: Occlusion & Mastication. **Location:** Hall 4. **#Abstracts:** 17

My sincere thank you to the abstract reviewers for their commitment to review the abstracts and for dedicating their time and energy to this enterprise.

Respectfully,
Asbjorn Jokstad
Prosthodontics Research Group Program Char

Frechette Award - Stephen Rosenstiel



The winners of the 2012 Frechette Awards were presented at the International Association for Dental Research annual meeting in Iguazu Falls, Brazil on June 22nd, 2012. The Frechette is the annual research competition for new investigators sponsored by the Prosthodontics Group of the International Association for Dental Research and honoring the memory of Arthur R. Frechette who served as Secretary-Treasurer of the IADR from 1968 until 1977. The winners were **Dr. Shinya Uruguchi, Osaka University, Osaka, Japan** for “Enhanced Osteogenesis of iPS Cells by Id2 Gene Knockout” and **Dr. D. Mota Moreira, University of Texas - San Antonio / Health Science Ctr, San Antonio, Texas** for “Antibacterial Activity of a Novel Silver Nanoparticle-Loaded Orthodontic Band Cement”. The individuals pictured are (left-to-right) Dr. Keiichi Sasaki, Japan, President IADR Prosthodontics Group; Dr. Uruguchi, Frechette Award Winner; Dr. Moreira, Frechette Award Winner; Dr. Nadezda Bessudnova, Department of Nano- and Biomedical Technologies, Saratov State University, Saratov, Russia, Frechette Award Finalist; Dr. Amilcar Freitas Jr., Biomaterials and Biomimetics, New York University, New York, NY, Frechette Award Finalist; Dr. Tatsuhide Hayashi, Department of Dental Materials Science, Aichi Gakuin University, Nagoya, Japan, Frechette Award Finalist; and Dr. Stephen F. Rosenstiel, Frechette Coordinator IADR Prosthodontics Group. Not pictured, Dr. Yuya Kamano, Department of Fixed Prosthodontics, Osaka University, Suita-city, Osaka, Japan, Frechette Award Finalist. In addition to the plaques Drs. Uruguchi and Moreira each received a check for \$1000 thanks to the generous support of the Whip Mix Corporation.



A record total of 34 abstracts were submitted for the 2013 Arthur R. Frechette Research Awards in Prosthodontics. There were 10 submitted in the Biological Sciences and Tissue Engineering oriented protocol category and 24 in the Materials Science or Bioengineering oriented protocol category. The abstracts were evaluated for (1) originality and scientific design of the investigation, (2) suitability of the methods of analysis, and (3) scientific value of the work by past presidents of the IADR Prosthodontics Group Drs. Ettinger, Kelly, Jokstad, Nathanson, Ogawa, and Thomason. The finalists are **Dr. M. Brezavscek, Ultraviolet treatment to enhance the osteoconductivity of a zirconia material**; **Dr. K. Gurzawska, Titanium surface nano-coatings with plant-derived molecules: pectins**; **Dr. H Oue, Tooth Loss Induces Memory Impairment and Neuronal Cell Loss**; **Dr. Guo, Regeneration of**

tooth roots in a large animal model; Dr. Lee, Compositional Analysis on Mechanical Properties and Biocompatibility of Titanium-Zirconium Alloy, and Dr. Royhman, A Tribocorrosive Investigation of Commonly Used TMJ Implant Metals. They will present their work on Wednesday, March 20, 2013: 1:30 p.m.-3 p.m. in Room 618 of the Washington State Convention Center and the winners will be announced at the Prosthodontics Group Business Meeting on Thursday, March 21, 2013 at 5:30 p.m. in Room 607.

Pre-Prosthetic Regenerative Science Awards - Keiichi Sasaki



Pre-Prosthetic Regenerative Science Award Presentation 2012 and 2013 Preview

Pre-Prosthetic Regenerative Science Award for Young Investigators was established in 2007 under the leadership of Professor Takahiro Ogawa, the former President of the Prosthodontics Group. The award recognizes original research by new investigators in the multidisciplinary field of pre-prosthetic or prosthodontics-related regenerative science, including tissue engineering, bone, tooth and soft-tissue regenerative sciences, graft materials research, maxillofacial reconstructive biology and physiology and implant biological research. The awards are co-sponsored by the IADR Prosthodontics Group and Japan Prosthodontic Society.

For 2012 IADR in Brazil, unfortunately we could not select the eligible presentations for the Pre-Prosthetic Regenerative Science Award, because there was few presentation related to the criteria of the award.

The 2013 Awards will be presented during the annual business meeting of the group during the IADR General Session.

Keiichi Sasaki

IADR Prosthodontics Group Student Research Fellowship - Wael Att



The 2012 IADR Prosthodontics Group Student Research Fellowship was awarded to Arman Butt, PhD student in Biomolecular Engineering, University of Illinois at Chicago (UIC) during the group's business meeting at the IADR General Session in Iguazu Falls, Brazil. His research project entitled "Novel Ti-V (Ti90Al6V4) surface modified by chemical vapor deposited TiO₂ coating and TiO₂ Nanotubes" competed with 4 research proposals submitted by different research groups and was finally selected as recipient of the fellowship. The proposals were judged and rated by reviewers with renowned research expertise for novelty, originality, multidisciplinary nature and scientific value. Final selection was made for the proposal with the highest score provided by the reviewers.



In the picture: (L-R): Dr. Tolou Shokuhfar (Dept. of Mechanical Engineering, Michigan Technological University) Dr. Cortino Sukotjo (Dept of Restorative Dentistry, College of Dentistry, UIC), 2012 fellowship recipient Arman Butt and Dr. Christos Takoudis (Departments of Chemical Engineering and Bioengineering, UIC).

Once again, I would like to thank all fellowship applicants for the submission of outstanding research proposals and further encourage all research groups to consider applying for this unique fellowship in the future. I also thank all reviewers for accepting the time-consuming task of evaluating and rating of multiple high-quality research proposals. The continuous support of Vita of this fellowship is highly appreciated.

The IADR Prosthodontics Group Student Research Fellowship is administered by the IADR Prosthodontics Group (PG) and co-sponsored by VITA Zahnfabrik and PG. This fellowship has been created in 2010 to encourage dental students, residents, and graduate students to consider careers in oral health research related to the topic of Prosthodontics. Proposals are sought in any category of research related to Prosthodontics.

The fellowship consists of a cash prize of \$3,000 + travel funds up to \$1500, with the funds being used to support direct costs for the research and travel/accommodations to present at an annual IADR General Session & Exhibition. The results of the research will be presented at an annual IADR meeting within two years of receiving the fellowship, by submitting an abstract within the Prosthodontics Group for a poster or oral presentation.

For 2013 fellowship recipient will be announced at the Prosthodontics Group Business meeting on Thursday, March 21: 5:30- 6:30 during the IADR General Session in Seattle.

Secretary-Treasurer Report - Cortino Sukotjo



As of September 2012, Central Office indicates the following membership information (Total 513):

1. IADR members: 107
2. IADR retired members: 1
3. IADR student members: 323
4. IADR/AADR members: 33
5. IADR/AADR retired members: 3
6. IADR/AADR student members: 46

The Prosthodontics Group hosted 3 symposia during the Iguazu Falls, Brazil meeting:

1. Patient Orientation and Quality of Life in Dentistry: Current State and Perspectives. Sponsored by: Oral Health Research, Prosthodontics Research. Organizer: Daniel Reissmann, University Medical Center Hamburg Eppendorf, Germany

2. Personalized Implant Dentistry: Diagnosis and Treatment beyond the Human Genome Project . Sponsored by: Diagnostic Sciences, Implantology Research, Periodontal Research, Prosthodontics Research. Organizer: Hugh Devlin, University of Manchester, United Kingdom

3. Prevalence and Risk Factors/Indicators for Peri-implantitis. Sponsored by: Implantology Research, Periodontal Research, Prosthodontics Research. Organizer(s):

Binnaz Leblebicioglu, Ohio State University, OH, USA; Alpdogan Kantarci, Forsyth Institute, MA, USA

Annual Financial Report (2012)

Financial Report for calendar year of 2011

Balance as of 12/31/11 **\$42,363.65**

Amount of annual dues per member \$18 (\$14 for the subgroup)

Income

Dues	\$1,946.00(as 9/30/12)
Whip Mix	\$1,000.00
Japan Prosthodontics Society	\$1,000.00
Panasonic	\$8,000.00
Vita	\$3,000.00
Total Income	\$14,946.00

Expenditure

Frechette Award	\$2,000.00
Frechetter Plaque	\$238.00
Regenerative Science Award	\$0.00
PG Student Research Fellowship	\$4,500.00
Brazil F and B	\$5,175.00
Seminar:	\$3,000.00
IADR website	\$250.00

Total expenditure **\$15,163.00**

Balance as of 12/31/12 **\$42,146.65**
