

AMERICAN ASSOCIATION FOR DENTAL RESEARCH NATIONAL STUDENT RESEARCH GROUP HANDBOOK

American Association for Dental Research

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Dear Students,

Among the many opportunities available in dental school, one exciting area you may select is the field of dental research. Participating in dental research would allow you to advance your knowledge of dentistry and to make valuable contributions to the field. The National Student Research Group is designed to support your endeavors in dental research in addition to your regular dental curriculum.

We want to thank you for reading our new revised handbook for the academic period 2006-2008, and we hope that this new handbook will enable you to take advantage of the many opportunities afforded by the National Student Research Group. This handbook was designed to address the most common questions:

- “How do I become more involved in the NSRG?”
- “How do I produce effective posters?”
- “How do I set up local Student Research Group events at my school?”

We hope that you will appreciate the new format of the handbook. Additionally, we invite you to download and become familiar with the supplemental information and constitution from the student section of the AADR Web page at <http://www.aadronline.org/nsrg>.

Congratulations! If you have made the decision to participate in research during your dental education then you will soon discover some of the benefits of being involved in the student research community such as wonderful travel opportunities, networking with and developing friendships with like-minded students and future colleagues domestically and even internationally.

Please read further!

Sincerely,

The Officers of the National Student Research Group

TABLE OF CONTENTS

- [Goals of the National Student Research Group of the AADR](#)
- [Starting or Activating a Student Research Group](#)
- [Recruitment of Student Membership](#)
- [Student Research Group Activities](#)
- [The NSRG Guide on “How to Produce Effective Poster Sessions”](#)
- [Sources of Funding for Student Research](#)
- [The Faculty Advisor](#)
- [Administrative Support](#)
- [Supplemental Information Links](#)

Goals of the National Student Research Group of the AADR

The AADR National Student Research Group (NSRG) is a student-run organization whose main purpose is to foster an environment in every dental school whereby students interested in enriching their dental education through research are encouraged to do so. It is composed of a network of self-governing local student research group (SRG) chapters at each dental school and is led nationally by officers elected through a majority of votes from all members. The NSRG serves to:

- 1) Provide student researchers with a national voice, and encourage local SRG participation
- 2) Provide a means for student researchers to promote/expand their interests on a local as well as a national level
- 3) Act as a support network linking all dental schools and their research programs
- 4) Help students generate funds and ideas necessary to better the field of dentistry through new and inventive research,
- 5) Promote student participation in dental research and its related disciplines,
- 6) Promote the advancement of dental research and related aspects,
- 7) Further the aims and objectives of the AADR and IADR as they relate to student research
- 8) Foster awareness of research and training opportunities in academic dentistry.

A major goal of the NSRG at present is to help dental students across the nation establish chapters and encourage participation in their respective schools, to ensure that research is seen as a vital aspect of dentistry. Our hope is that all schools will recognize the benefits of incorporating research into their curricula and will choose to do so formally or through local SRGs.

A summary and introduction of the NSRG activities spanning 2004-2006 was published in the *Journal of Dental Research*:

[Roger, James M., Javarone, Julie A., Falba, Erin L., Markiewicz, Michael R., Morlandt, Anthony B. The National Student Research Group of the AADR--An Introduction *J Dent Res* 2007 86 \(5\): 388-391.](#)

Starting or Activating a Student Research Group

Dental schools without active Student Research Group (SRG) Chapters have the potential to form one. SRG Chapters benefit both students and institutions. Forming a SRG Chapter requires a nucleus of students interested in research, faculty willing to nurture that interest, and an administration supportive of the endeavor. The success of a SRG Chapter ultimately depends on the desire of students to be involved with dental research.

So what are the steps in starting a SRG Chapter at your school?

Organizational Meeting

The first step in forming or activating a SRG Chapter is to conduct an organizational meeting. A minimum of four students is necessary to be considered a Chapter. At the organizational meeting, students should:

- 1) Outline the purpose of the SRG and its potential benefits. (This could be as simple as increasing students' awareness in dental research)
- 2) Discuss specific objectives such as, research faculty giving presentations, getting research included as part of a dental school's curriculum, etc.
- 3) Adopt a constitution.*

*The constitution should include a list of the officer positions, the roles of the different positions, and a procedure for the election of the officers.

Administrative Contact

Students are also advised to contact the administration of their school and seek its support as soon as possible. Student organizers of the newly formed chapter should meet with the Director of Research or equivalent for faculty support. Because the SRG Chapter can play an important part in a dental school education, a synergistic relationship between the SRG Chapter and dental school should be nurtured.

Meeting Ideas

Ideas for meetings range from faculty and student presentations of the current literature in a journal club format to faculty and student presentations on their research. Student presentations seem to make a greater impression than faculty presentations because it demonstrates that students can have an active role in dental research.

Connecting to the National Student Research Group

After a local SRG Chapter is formed, the AADR Global Headquarters in Alexandria, VA, should be informed of its existence and be provided with a list of the current officers. The contact at the AADR is Marissa Naspinski, mnapinski@aadronline.org.

Recruitment of Student Membership

Active SRG membership is both the most important aspect of a local chapter to accomplish our goals and one of the most difficult to maintain. Membership tends to be transient for many students, so recruitment is a must throughout the year. This should be an active process by all members. A very easy way to increase the membership of your SRG is to introduce more students to the benefits of research by inviting students to lunch meetings and presentations, then expand on the different opportunities for research that exist at your school.

One method of determining what research opportunities exist at your school is to contact members of the faculty and form a list of those who are currently involved in projects, or are interested in beginning projects. This can be used as a valuable resource for students trying to determine their area of interest. The following are some suggestions that will directly help with recruitment:

- 1) Advertisement of the SRG Chapter and its activities is essential. Posters, mailbox flyers and general e-mail announcements about SRG Chapter activities or AADR/NSRG news should be posted throughout the school. You want students to see that the SRG is doing something wherever they go.
- 2) First-year-student orientation is an excellent time for advertising your SRG Chapter and can be very productive. Similarly, pre-recruitment can be done at the time of admission by including a one page handout or the NSRG brochure from the supplemental material with their admission folder
- 3) A reception for First-year students, sponsored by the SRG Chapter, can introduce students to the benefits of the SRG at the beginning of their dental education.
- 4) A seminar on "How to Get Started in Research" is essential to attract student and get them involved.
- 5) Student research competitions with prizes are an excellent way to generate interest in the SRG.
- 6) A Student Research "Day" or "Week" will bring student research to the school as a whole and generate student interest in research.
- 7) A Newsletter distributed by the local SRG Chapter is a great way to disseminate information and recognize students who are excelling in their field of research. This is also a great way to achieve national recognition through the NSRG newsletter competition.
- 8) Faculty membership is a great idea. Faculty are excellent recruiters and resources.

If you have trouble staying on top of membership or face other challenges, please remember to use your NSRG officers as a resource. They can be contacted *via* e-mails posted on the AADR Web site: <http://www.aadronline.org/nsrg>.

Student Research Group Activities

Every SRG Chapter is different. Regardless of how informal, every chapter should have an activity agenda. The following are suggested activities that have been done by some chapters:

- 1) Lunch-time meetings. Probably the most popular form of SRG meeting at dental schools: Invite faculty members and students to present their research to the local SRG. Pick one date a month and have a different specialty represented each month. Offer 1 hour of CE credit for each lecture if your school requires CE to graduate. The chapter may wish to encourage graduate students in the specialty programs to attend and/or present their research
- 2) Journal Club Meetings: Invite students/faculty members to present articles from the current literature in a discussion format
- 3) Newsletter. Publish a quarterly newsletter for your membership. It could include important events, deadlines, contact people for research interests, etc. This could also be produced *via* e-mail on a more frequent basis
- 4) Publish Annual Abstracts. Publish and distribute a program of the abstracts of students presenting their research at the annual AADR meeting or other meetings
- 5) Table Clinic. Sponsor an annual table clinic event with faculty members as the judges. Try to solicit prize money from your local or state dental societies.
- 6) Fund-raising Activities. Raise funds for various activities. Hold a Raffle with a local sponsor donated gift, sell T-shirts, do a bake sale, offer engraving service to students for instrument identification, sponsor an auction (have faculty members make donations; i.e., denture wax-up, gold crown wax-up, dinner for two at his/her house, etc...throw an auction party that will provide fun, casual interaction between faculty and students), etc
- 7) Workshops. Hold workshops on “How to Make a Poster”, “How to Present Your Research”, “How to Write a Good, Concise Abstract”, and/or “How to Get Funding”. You may want to try to do these in the evenings or at lunch including food
- 8) Annual Awards. Honor active fellow student-researchers for their research efforts. Honor a faculty member who goes above and beyond to help students get involved with research
- 9) SRG Bulletin Board. Maintain an announcement space on a bulletin board to disseminate SRG info. This may also be done more easily at your school *via* e-mail or a local Web site
- 10) Social Activities. The SRG should be encouraged to sponsor social events. These could be for just SRG members or for all dental students

The NSRG Guide on “How to Produce Effective Poster Sessions”

A poster session is a visual presentation of a research study or project, highlighted and mounted on a poster board that is displayed on a 4' x 6' flat wall area and presents the information in a summarized format. A poster session provides an opportunity for viewers to talk with the author.

The format is usually determined by the professional organization hosting the conference. These guidelines may also affect the design of your poster session. This can include the allotted space and type of display space. Check with the organization or the conference sponsors for specific size requirements.

Sample Poster Format

- Abstract
- Introduction
- Materials and Methods
- Discussion
- Results (4-6 Figures)
- Conclusions

Producing a Good Poster Presentation: The Most Important Steps

(1) Start early. Most difficulties in time, expense and quality come from waiting until the last minute. Allow two months to produce an effective poster.

(2) Present major points and few details. Readers don't expect a lot of detail, documentation, and discussion in a poster session. The content should be a visual guideline for a 5 to 10-minute presentation.

(3) Use graphics instead of words where possible. One picture is worth a thousand words – yet the poster should not be entirely figures and complicated graphs. Good posters have a balance of 4-6 figures, tables, bulleted commentary, and introductory and conclusion material

(4) Introductory material and literature references are important – but remember that this is a 5-10 minute presentation, so limit the scope of your background explanation.

Design and Readability

- Design your material to read from left to right and from top to bottom.
- Where possible, use words or phrases set off by bullets instead of full sentences.
- Use indented paragraphs. Our vision has been conditioned to pick up an indented paragraph as the beginning of a new area.
- Use headings and subheadings. Boldface and underlined headings do two things:
 - Guide the reader
 - Condense information.
- Choose readable lettering for the text. The lettering should be large enough to be read from 4 feet away.
- Use color. It can emphasize major points, show differences and indicate changes.

Poster Session Production Media Resources

Please provide the Media Resources Director all the information necessary to prepare with your Poster Presentation. Included should be the abstract, purpose, materials and methods, results, and conclusions, plus all graphs, tables, and illustrations to be finalized in Media Resources. If possible, submit all text on a computer disk. This will ensure accuracy and speed up the process for you.

We will make color or B / W prints from your slides, if needed. Upon receipt of all pertinent information, assignment for the preparation of the poster will be made to an artist. There should be an open line of communication between you and the artist to discuss any changes or problems with the research project.

Media Resources requires about 5 working weeks prior to the date you request for completion.

Questions to be Considered

- What are the size requirements of the poster and the case it is to be carried in?
- Do you need the program number and the presenter's photo on the title board?
- Do you need assistance in preparing illustrations?
- Do you need location photography, studio shots, or prints made from slides?
- What colors do you want for the poster boards, letteron, and decorative tape? Do the colors need to coordinate with your photos?
- Do you need Media Resources to typeset your information? If so, you will need to proofread and return for corrections. If possible, have your information already set on a computer disk for printing on a laser printer, saving time and expense.

The cost of producing a poster may vary from \$60 to \$130, depending upon:

- Graphics and artwork needed
- Photo shots and enlargements

Complexity of the design * Whether you provide the information on a computer disk for laser printing or if you need Media Resources to typeset.

Sources of Funding for Student Research

A primary objective of the SRG is to “connect” interested students with available funding sources. Some dental schools offer intramural research programs for students, these institutions must provide the primary funding for student projects. These can include individual student research fellowships, work-study programs, training grants, and faculty-sponsored research. Your own local SRG may be able to provide assistance as well. Several local chapters hold annual fund-raisers whose proceeds are generated toward supporting student research. In fact, one local chapter generates thousands of dollars through an auction, where students and faculty auction off their personal time and services and a raffle where members of the dental school community can win a trip to Ireland!

Extramural funding of research is also available. Sources for outside research support include*:

- 1) AADR Student Research Fellowships
- 2) State Dental Associations
- 3) Alumni Groups
- 4) Local Research Foundations
- 5) Dental-related Industry (Colgate, Procter & Gamble, etc.)
- 6) Local AADR Sections
- 7) National Institutes of Health (NIH)

**Please see the Supplemental Information Links section at the end of this handbook for more detailed resources*

Travel Support

Travel support for presenting research at meetings is essential for student researchers, since an important component of research is sharing results with the research community. Unfortunately, a major barrier to students’ attending research conferences stems from travel expenses.

Thus, an attractive benefit of the SRG is the potential for travel to present research findings at a research meeting. One focus of SRG fund-raising may be to obtain travel support. Again, supporting groups such as school administrations, local AADR Sections, local alumni, or dental groups are also potential sources for travel assistance.

The Faculty Advisor

Selection of an enthusiastic faculty advisor to assist the student leaders of the SRG is critical to the long term success of the SRG at your institution. The faculty advisor of a Student Research Group chapter at a dental college has the following roles:

- 1) The faculty advisor provides continuity of the SRG chapter during the steady turnover of student leadership and membership through the years. Therefore, the faculty advisor plays a key role in maintaining the group's steady momentum.
- 2) The faculty advisor is a liaison to the administration and other faculty. While students typically interact well with administration and faculty, occasionally the faculty advisor can play an important role in communicating concerns, objectives, or needs to both sides.
- 3) The faculty advisor develops/mentors student leadership.
- 4) The faculty advisor encourages active faculty support. Faculty support and assistance are an integral part of the ultimate success of the SRG and its objectives.
- 5) The faculty advisor serves as a link between both students interested in research and those involved in research. As well, the faculty advisor serves as a link between students interested in research and faculty supportive of student research.
- 6) Faculty advisors may encourage local and regional interaction among students through regional meetings and research competitions.

General Faculty Support

Faculty support of the NSRG has been excellent. The strength of faculty support lies in their willingness to foster student interest in research. In this capacity, faculty members may:

- 1) Act as a mentor in developing the research potential of a student
- 2) Provide research opportunities to the student
- 3) Assist students in securing funding for research
- 4) Provide facilities for research
- 5) Speak on research at SRG Chapter meetings
- 6) Generally increase student enthusiasm in research.

Faculty should understand the benefits of student research to dental education and the training of a future dentist. It is particularly important to keep the entire dental faculty informed of the SRG activities. Typically when faculty are invited to SRG activities, there is a reciprocal increase in student interest in the SRG.

Administrative Support

Support by the dental school's administration can greatly enhance the success and longevity of an SRG Chapter. Since student involvement is usually limited to 3 or 4 years, it is necessary for the faculty and administration to provide continuity and ease the transition as new students assume official positions. This support may range from general approval of the SRG Chapter to active personal involvement of the Faculty Advisor and Research Director/Dean.

- 1) Financial support may assist in covering SRG Chapter activities or individual student research
 - a. Assistance in annual membership dues to AADR
 - b. Support for meeting registration fees and travel to research meetings
 - c. Student research fellowships
 - d. Assistance in financing SRG activities, e.g., sponsoring a guest lecturer

- 2) Administrative support facilitates the smooth and continuous operation of a local SRG Chapter
 - a. Secretarial assistance for SRG Chapter business
 - b. Assistance in advertising SRG Chapter activities
 - c. Bulletin board space
 - d. Space for SRG Chapter meetings and events
 - e. Office space for the SRG Chapter.

- 3) Educational support can greatly encourage student interest in research. In addition to financial and administrative support, an institution can demonstrate its recognition of the educational benefits of student research through several methods.
 - a. Elective academic credit for student research
 - b. Compensatory release time from clinic for time spent in student research
 - c. Specific research development educational programs for undergraduate dental students
 - d. Graduation with honors
 - e. Graduation with a BS in Dentistry (in addition to a DMD/DDS) after the student completes a specified research project.

Supplemental Information Links

In order to find out the latest updated information about the NSRG please see the Web page at <http://www.aadronline.org/nsrg>, paying particular attention to the [Supplemental Information](#) to this handbook.

From the NSRG page, you can access additional information about:

1. National funding provided from the AADR/NSRG and NIH / NIDCR
2. AADR/IADR sponsored awards,
3. The DENTSPLY/Caulk Competition guidelines
4. Annual student-only research meetings such as the Hinman Symposium and the ADA conference on Research
5. NSRG awards
6. NSRG election procedures
7. Constitution and Bylaws for the NSRG and AADR
8. Further supplemental information