

American Academy of Health Physics American Board of Health Physics

N-E-W-S

PRESIDENT'S MESSAGE C. E. Roessler

The year is flying by. I don't have many accomplishments to report; but a number of things are in progress and it looks as though I'll be turning a lot over to incoming President Lee Booth in February 2001. Following are some of the issues under consideration and some of the ongoing activities of the Academy.

In July, ABHP Chairman Ed Maher and I received copies of a notice from the U.S. Nuclear Regulatory Commission (NRC) indicating that a listing of specific boards whose diplomates automatically fulfill the training and experience requirements for Radiation Safety Officer (and several other categories of individuals) will not be incorporated into the text of the proposed revision to 10 CFR 35. "Medical Use of Byproduct Material." Rather the NRC will entertain requests for recognition and will place the names of recognized boards on a list maintained on the NRC web site. It appeared to us that, while an ABHP Diplomate who adheres to the Standards of Professional Responsibility for CHPs meets the intent of the revised 10 CFR 35, we could not state that ABHP certification necessarily ensured meeting the entire letter of the requirements as stated in the revised 10 CFR 35.50. We informed NRC staff of our concern that the language of the revised regulation would exclude the ABHP as a recognized Board in this context. As of this writing, this is still being pursued.

IN THIS ISSUE:

Several members brought to the attention of the Academy proposed State of New York Medical Physics Practice Legislation that would provide for licensing of Medical Physicists and would define Medical Health Physics as one of the four branches of Medical **Physics** competence along Diagnostic Radiological Physics. Medical Nuclear Physics. and Therapeutic Radiological Physics. There was concern that this legislation would exclude health physicists currently working in medical settings from doing the radiation safety and quality assurance work that they have been doing. In following through on this, we learned that several other states already have medical physics licensure and that other bills are underway in a variety of states. Jean St. Germain, Past Treasurer of the AAHP, is tracking developments in New York and she states that NY health physicists and the two NY

chapters of the HPS, along with NY medical physicists, have been involved in the process, that CHPs can and will continue to perform their current responsibilities. and that the "grandfather" clause will allow an experienced. competent person to practice. While feeling good about New York State, she encourages the Academy to stay in touch with the issues as the licensure campaign proceeds state by state.

The participation of the AAHP with the American Board of Medical Physics (ABMP) in the ABMP certification in Medical Health Physics continues to be a discussion item. It is questioned for at least two reasons: 1) this activity is a reversal of our movement away from specialty certification and .2) this is deferring a form of Health Physics certification to another board other than the ABHP. On the other hand, people in the medical health physics field see a need for Medical Health Physics specialty certification, the ABMP program is a given, and by participating with that Board, the AAHP and ABHP stay tied into the process. We are several years into our initial 5-year relationship and it is time to review this relationship. This one of several issues in the general realm involving the relationship of health physics with other environmental health and safety professions, crosstraining and cross-over in related disciplines, evolving needs credentialing. and reciprocal relationships of the ABHP and AAHP

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with other EH&S credentialing bodies. An ad hoc committee consisting of Executive Committee Member Joe Alvarez and President Chuck Roessler has been tasked with preparing a "white paper" on "Reciprocal Relationships" for review by the Executive Committee.

The Academy is doing a self review and looking forward – President-elect Lee Booth continues to work on the review of the Strategic Plan adopted in 1999, evaluating how it is being implemented, and identifying any new initiatives and assignments inferred by the plan. Also folded into this effort is a review of the results of the 1999 Membership Opinion survey. We expect Lee to have a report at the Mid-winter Executive Committee meeting in February.

The Professional Development Committee has completed several years of effort in developing a Standard for Qualifications and Practice (SQ/P) for University RSOs. This document has been referred to the HPS RSO Section for review and co-sponsorship and to the Campus Radiation Safety Officer organization for review. It is expected that SQ/P's will be published as inserts to the HPS Newsletter similarly to the way ANSI/HPS standards are published. We have asked the HPS for cost sharing in the publication; this will require a final review by the HPS Executive Council. It is hoped that all of the review steps will be completed soon and that the document will appear in 2001.

Also in the area of professional development, we have had inquiries about examples of where the CHP designation was a required or preferred job qualification. Informal discussions at the Denver meeting indicated that there are some instances of existing or proposed financial incentives for CHPs. Since we didn't have any hard data on these subjects, we included a survey form in the 2000 mailing of maintenance fees notices. Several

hundred survey forms were returned; a number of specific job titles requiring or preferring CHP status were listed and few examples of financial incentives were reported. Some frustrations were also vented. The survey returns are now in the hands of the Professional Development Committee for analysis with a target of a report by the Midwinter Executive Council meeting.

We have requested a time slot for the "Academy Day" during ARSCE-2001 in June. We are working on program ideas for the special session but don't have a firmed-up topic as of the date of this writing (October). Last year Academy Day was moved to Wednesday from the traditional Tuesday to accommodate moving the HPS awards luncheon earlier in the week (Tuesday). We have requested Tuesday for Academy Day but as of this writing the HPS awards luncheon day had not been settled.

AMERICAN ACADEMY OF HEALTH PHYSICS EXECUTIVE COMMITTEE

Minutes of Meeting of June 24, 2000

Call to Order

President Charles Roessler called the meeting to order at 1:30 p.m.

Regis Greenwood was re-appointed as Acting Parliamentarian.

Welcome to Members and Guests

President Roessler welcomed members and guests in attendance; attendees are listed below:

- Les Aldrich, Chair, Continuing Education Committee
- Joseph Alvarez, Director

- Jack Beck, Chair, Nominating Committee
- Lee Booth, President-elect
- Elizabeth Brackett, Secretary
- Tom Buhl, Treasurer
- Herman Cember, Past President
- George Chabot, Finance Committee
- Dale Denham, Director
- Tom Essig, Treasurer-elect
- Regis Greenwood, Acting Parliamentarian
- Nancy Johnson, Program Director
- Ken Miller, Liaison to ABMP
- Matt Moeller, Chair, Professional

- Development Committee
- Edward Maher, Chair, ABHP
- Steve Rima, CHP News Editor
- Charles Roessler, President
- Doug Schult, Exam Site Committee representative
- Jim Tarpinian, Invited guest
- Paula Trinoskey, Liaison to NRRPT Board
- Al Tschaeche, Visitor

President's Report

President Roessler submitted several written reports that were included in the members' notebooks. These reports were:

- AAHP President's Report June 2000 - This was a report of President Roessler's activities since January 2000. The first item stated that a draft NCRP Report had been forwarded to Past President Herman Cember but Herman noted that he had not received it. A discussion regarding recent NCRP financial difficulties followed.
- Ties between Health Physics and Industrial Hygiene – This was a guest column President Roessler wrote for the AAIH. [This was recently reprinted in the CHP Corner – Ed.]
- AAHP Information Report to Health Physics Society, June 2000 - HPS President Ray Johnson requested that this be included.

President-Elect's Report

President-elect Booth had submitted a written report that was in the members' notebooks. He noted that when making committee appointments he called people that he didn't know in an effort to randomize the selection process and bring in new CHPs.

Academy liaisons are still needed. Lee couldn't find information regarding the responsibilities or expectations of the liaisons and recommended that these positions be formally identified and defined.

Past President's Report and Report on Academy Special Session

Past-president Cember reported that he had organized the AAHP special session at this HPS meeting. The topic is "Bridging Radiation Policy and Science," a review of the BRPS conference in Virginia. The half-day session will be co-chaired by Ken Mossman and Sig Magnusson.

Secretary's Report

Minutes from the January 31, 2000 AAHP meeting were included in the members' packets.

Liz Brackett reported the results of the AAHP election. With 597 votes cast, the new officers for 2001 are:

- President-elect: Jim Tarpinian
- Treasurer: Tom Essig
- Director: Scott Medling

Treasurer's Report and Report of Finance Committee

Treasurer Buhl referred the members to the Treasurer's Report included in their materials. This report contained a summary of his activities since the January 2000 AAHP meeting. He then referred to a number of finance reports:

- the Finance Committee report;
- Statement of Cash and Investment Balances as of March 30, 2000;
- spreadsheets with actual to budget comparisons, including the FY00-01 proposed budget;
- a graph showing the record of asset growth for the AAHP longterm funds from Salomon Smith Barney for the period of 1/4/96 to 5/5/00; and
- Financial Statements for the Years Ended August 31, 1999 and 1998 (includes an Independent Accountant's Report).

The Academy's Financial Consultant has notified the Finance Committee that he will be moving to Prudential Securities. The Finance Committee recommended switching the Academy's investment accounts from Salomon Smith Barney to Prudential Securities in order to remain with the same Consultant

A deficit is being projected for the third year in a row. The budget is generally conservative; a deficit was also predicted last year but we ended with a surplus.

Motion: A motion was made to accept the budget as presented by the Treasurer and Finance Committee.

Discussion ensued. Les Aldrich mentioned that he would like to add \$3500 to the budget for the taping of AAHP-sponsored courses so they would be available for members to rent in order to receive credits toward recertification. He didn't expect to recoup the costs. The HPS currently tapes PEP classes so Nancy Johnson suggested checking into the call for these before spending money on taping our courses.

Motion amendment: A motion to amend the budget to include an additional \$3500 for the taping of courses failed to receive a second. The original motion passed unanimously.

President Roessler noted that we would entertain proposals at future meetings on the taping of the eighthour courses.

Motion: A motion was made that the Investment Policy be changed to allow the purchase of "public" mutual funds, such as Janus or Fidelity.

This would add flexibility to the AAHP investments. There would be

some increase in risk but these mutual funds are not very volatile. Our Financial Consultant feels that the flexibility would offset the risk. The motion passed unanimously.

Program Director's Report

Nancy Johnson reported that she had been working on the usual activities; her written report was included in the members' notebooks. She noted that the number of exam applicants is down this year.

Nancy reported that Richard Burk suggested a change to the Academy (CHP) logo. He feels that it doesn't convey enough information because it says only CHP and does not include "American Academy of Health Physics" in the design.

Motion: A motion was made to redesign the logo. The motion passed unanimously.

Continuing Education Committee

Chair Les Aldrich referred to his report in the members' materials. There were three courses presented this weekend in Denver. Attendance at the Transuranic course was 68, Industrial Hygiene: 46, and Transportation: 48.

Exam Site Selection Committee

Chair Don Honey was not in attendance. Doug Schult delivered a written report to the members. The committee has recommended adding another member to their group. The bylaws specify three members but don't rule out a temporary addition.

Motion: A motion was made for an ad hoc appointment of an additional

member to the Exam Site Selection Committee and for the Parliamentarian and the Secretary to draft a change to the bylaws for submittal to the entire Academy so this can be made permanent. The item passed unanimously.

Nominating Committee

Chair Jack Beck reported that the committee had gotten off to a slow start because of some confusion. He noted that Jerry Martin will be the chair next year and was helping Jack finish up this year and Jack will help Jerry get started next year. They had made five recommendations for the open positions on the ABHP; one declined because of commitments. The Academy Executive Committee elected Mary Birch and Eric Golden.

Professional Development Committee

Chair Matt Moeller reviewed the responsibilities of the committee, which include expanding and enhancing the professionalism and benefits of ABHP certification. It is also responsible for encouraging and assisting in the recognition and acceptance of the importance of certification by others. There were four items he wanted to discuss:

• The committee has produced a folder that will be available at the meeting to those interested in pursuing certification. These are primarily intended for use at other meetings and will be given here by special request. They were available for the May Industrial Hygiene meeting. Two thousand folders were produced for a cost of \$1703 plus shipping.

The Standard of Qualification/Practice (SO/P) that was approved at the Midvear meeting was forwarded to the Presidents of the AAHP and the RSO Section President, Nancy noted that some changes were made to the SQ/P at the last meeting and Chuck doesn't think he has seen a copy since the changes were incorporated. Tom Essig stated that he would have the changes made and be'll send it out again. There was some how discussion as to disseminate the standard. Distribution in the Newsletter in the same manner as ANSI standards was favored, but to avoid confusion we don't want it to look like an ANSI standard. Discussion of the cost and when it would be included in the budget ensued. It was thought it would fall into the next budget cycle. Nancy estimated it would cost \$2500-3000 to publish it in the Newsletter, based on the cost of publishing the CHP News.

Motion: A motion was made that we:

- proceed with the publication of the University RSO standard;
- obtain concurrence of the HPS and RSO section:
- pursue the route of an insert in the Newsletter;
- attempt to secure cost sharing with the RSO section; and
- put a cost cap of \$3500 on the publication.

The motion passed unanimously.

 An SQ/P for hospital RSOs has been drafted. Bruce Tomadsen and an NRC employee were the original authors but the NRC employee has been replaced. The NRC employee felt he/she would not be able to provide any inclusion into this standard that was not directly related to NRC regulations and a one-for-one correlation. The Committee did not view this as the intent of the standards. The issue has been resolved and the NRC employee will continue to serve as a review person on the standard but not a primary author.

 The Committee is responsible for the set-up and take-down of the AAHP booth at meetings. There is new material for the traveling booth (not the one used at HPS meetings). Matt asked for volunteers to staff the booth at this meeting.

Chuck asked where, in addition to the standards we are going promulgate, does the requirement for certification already appear and are there efforts that can be done to encourage the wider use of certification. Is this something we should have a committee looking at and compiling? The HPS Continuing Education Committee (CEC) will be putting together a questionnaire soon: this question could be added. The PDC and the HPS CEC will work together informally between now and the next meeting.

Newsletter

Steve Rima reported that he recently assumed the duties of newsletter editor. Gary Kephart had been the editor for a couple of years with Steve serving as the associate editor. Steve would like to recruit a new associate editor so there will be someone in the pipeline.

Steve reminded everyone that it

would be nice to get more input from the ABHP and the Academy executive committee.

Web Page

Scott Medling had submitted a written report that was included in the members' notebooks. He reviewed the information that's currently included on the website. There have been 43,000 visits to the site since it began in August of 1996.

George Vargo noted that the Council of Engineering and Scientific Specialty Boards (CESB) surveyed the websites of its member societies and found the AAHP/ABHP's to be the best

Consultant list/resumes

Chuck Roessler sent an e-mail message to members regarding this subject prior to the meeting. A copy of this message was also included in the members' materials. Four options were proposed. Dale Denham had solicited opinions on this issue from a number of people and distributed his findings to the Executive Committee.

Motion: A motion was made that the Executive Committee adopt option 2 from Chuck Roessler's report. This recommendation reads "Construct the Academy membership list so that it is available to all visitors and contains, and is searchable for, area of expertise, geographic location, availability as a consultant, etc."

Discussion: The website currently contains a list of all CHPs and e-mail addresses. Only active and emeritus members should be included.

Friendly amendment: Contact with

the members will also give them the option of not being listed on the website.

The motion as amended passed unanimously.

Report of the American Board of Health Physics

Chair Ed Maher distributed a written report to attendees. The Part 1 Panel Chair has reported that she believes the Part 1 question bank needs modernization. A subcommittee has been established to determine which questions need to be modified.

Items referred to the AAHP by the ABHP:

- There was a strong feeling on the Board that the amount of credits awarded for certain activities was out of balance in relation to other activities. An example of this was the number of credits given for grading the part 2 exam. They would like to refer this to the Continuing Education Committee.
- A question submitted to the Ask the Expert website asked if there were any plans to establish a permanent associate status for those individuals who have no intention of taking Part 2. Currently an individual passing the Part 1 exam is given associate status and dropped after seven years if Part 2 is not successfully completed. Chuck noted that we have a time limit and no plans to change it.

Motion: A motion was made to accept the changes to the Policy Manual as detailed in Ed's report. The motion passed unanimously.

Ed's report contained a discussion of contact by the Laser Institute of America (LSIA) for consultative assistance on how the ABHP conducts and proceduralizes its certification process. After much discussion, Chuck felt that this was worth discussing further with the LSIA. Ed will tell them to contact Chuck

American Board of Medical Physics (ABMP)

Ken Miller reported for Rich Vetter. Both are active participants in the ABMP; Ken Miller is currently the Secretary of the organization. He has served on both the ABHP and ABMP and thinks that a reciprocal agreement on Part I would be appropriate. The money we (the AAHP) supply to the ABMP supports travel for Rich and Ken. We have tremendous influence by having two members on the board. Ken noted that he thought it was in the best interest of the ABHP and the AAHP that we continue to support the ABMP because having two representatives keeps track of the process, and if we address and approve the reciprocity issue it would be mutually beneficial to both Boards.

National Registry of Radiation Protection Technologists (NRRPT)

Paula Trinoskey reported that the NRRPT belongs to the process that grants college credits for some alternate type programs. They have been granted 30 credits, and this was recently extended. These credits are granted if the college accepts them. This has been a major encouragement for individuals to continue with their education. This recommendation is given by the American Council on

Education and is reevaluated every three years. It cost \$6000, mostly for travel

They are putting together a book as a study guide. This is a departure from things they have done in the past.

There is scholarship money available for RPTs to attend programs in health physics. Grants are about \$1000 per semester, with some up to as much as \$2500.

Council of Engineering and Scientific Specialty Boards Status

This topic was discussed in a presentation by George Vargo to the ABHP, with the AAHP Executive Committee as invited guests, just prior to this meeting so a detailed report was not given.

George Vargo noted that he was appointed by the Board to a 3-year term with this organization and stated that he would like to continue his involvement. He is currently on the committee on scientific specialty boards and is working with them on finance policies. He reported that there was a 10% reduction of dues so it is now \$4500.

Ad Hoc Committee on Reciprocal Agreements

Joe Alvarez reported that we don't have very good reciprocal agreement with Medical Health Physics but said the bigger question was why we are doing this in the first place. He thought we should go back and look at the strategic plan – are we going to be involved in specialties? He recommends the we get out of this or decide what we are going to do overall and use this as a vehicle to

decide what we are going to do in specialty areas. Ed Maher noted that we currently have a five-year agreement with the ABMP and should complete our commitment but that we should go back and renegotiate at the end of it. Chuck Roessler stated that because of the peculiarities of the medical culture it might carry more weight in the medical health physics area if an individual was accredited by the ABMP rather than the ABHP. He thought we needed to look at the question of relationships with other certifying programs and to write a white paper on the issue.

Intersociety Credentialling Task Force

Herman Cember reported that the ICTF has disbanded. Included in the members' materials was a letter from the American Society of Safety Engineers sent to the President of the HPS recommending this disbandment because they felt its goals were inappropriate as a group development project.

Chuck Roessler suggested that question of reciprocity and intersociety relations continue to be an agenda item but there be no particular action at this point.

Joyce Davis Memorial Award

Dale Denham had included a status report on the ad hoc committee activities in the attendees' materials and distributed a proposed citation at the meeting.

Motion: A motion was made to establish a Joyce P. Davis Memorial Award for an outstanding member of the

Academy who was a major contributor to the work of the Academy, the American Board of Health Physics, or the Examination Panels. The motion passed unanimously.

CHP Embosser

Joe Alvarez distributed proposed changes to our procedures to cover the use of an embosser. The SOP contained a proposed design for the seal. There was discussion regarding the inclusion of a date on the stamp but it was not adopted. Embossers

will be ordered through the Academy and distributed via the mail. There was a question about title protection and a discussion ensued. This entire issue will be considered and given more discussion.

Motion: A motion was made to accept the proposed design of the seal for the embosser. The motion passed unanimously.

Accreditation of Academic HP Programs

Rich Brey, chair of the HPS

Academic Education Committee, reported on the status of accrediting health physics academic programs. Copies of his slides were distributed to the attendees. The HPS has been approved by the Accreditation Board for Engineering and Technology (ABET) as the cognizant technical society for Health Physics Accreditation.

The next meeting will be on Tuesday, February 6 @, 8:30 A.M.

REMINDER

Applications for the Certification Exam must be postmarked by January 15th. Application materials may be obtained from the Academy web page:

www.aahp-abhp.org

or from the Secretariat, 703-790-1745.

Address contributions for CHP News and "CHP Corner" to:

Steve Rima, CHP, CSP Work: 970-248-6787 Fax: 970-248-6725 sdrima@mactec.com

Articles, Letters to the Editor, etc. are welcome. Contributions may be in the form of electronic files (MS Word or WordPerfect), text files, or hard copy.

THE 2000 CHP SALARY SURVEY

Gary Lautenschlager

Introduction

This year's Certified Health Physicist (CHP) survey data was collected in conjunction with an inaugural webbased survey of the entire Health Physics Society (HPS).

Chris Graham will report the HPS salary survey results separately in the Health Physics Newsletter.

The survey was also available in hardcopy form for those who preferred to fax or mail their responses.

Questions about this survey should be directed to Gary Lautenschlager, via email: glauten@hotmail.com.

Data Analysis

The salary ranges marked by CHPs on the completed survey forms were rounded to the midpoints of those ranges before statistical analyses were performed. For example, if a CHP marked the salary range \$50,000 to \$54,999, their salary was rounded to the midpoint value of \$52,500.

Responses from CHPs who were either part time or retired were not analyzed, since the data did not appear to allow meaningful comparisons to be made.



To avoid skewing the results, data from six survey respondents were excluded from the data analysis because they indicated that they earned \$170,000 or more per year.

Of 53 respondents who reported receiving a significant (10 % or more) salary increase upon attaining ABHP certification: 25% received this increase from their current employer, 28% from a promotion with their current employer, and 47% received this increase from a new employer. CHP salaries by region are also presented in this report.

Data Presentation

In an effort to make the results of the survey interesting and useful, CHPs were subcategorized in several ways by education, primary job responsibility, years of experience, and combinations of these subcategories.

Readers are cautioned that for statistical validity, results were usually given only if there were 10 or more CHPs within that subcategory.

Data presented for one subcategory of CHPs may not be possible for another subcategory. However, some exceptions were made for general interest.

The subcategories in the tables may also change from year to year, depending on the number of responses received. Every effort was made to keep the subcategories consistent with previous surveys, but if there were an insufficient number of CHPs the results were not given.

Tables and Figures

Tables show results for full-time CHPs who received health, vacation, and retirement benefits from their primary employer unless otherwise noted.

Histograms of Table 1 data is included as Figure 1, and Table 2, Masters Health Physics data is included as Figure 2.

Acknowledgements

Thanks to all who participated in this survey. Your participation benefits the entire health physics community. Special thanks to Scott Medling for his helpful comments and suggestions, and for coding the survey and making it available on the Internet.

All CHPs	Count	Average	Median	Max	Min	Std Dev
CHPs	313	\$83,602	\$82,500	\$152,500	\$32,500	\$20,306

Table 2: CHPs by Education and Field

Table 2: CHI'S by Education and Tield								
Education	Count	Average	Median	Max	Min	Std Dev		
Bachelor's Health Physics	18	\$74,444	\$ 72,500	\$107,500	\$37,500	\$19,108		
Bachelor's Other Field	31	\$81,371	\$82,500	\$137,500	\$37,500	\$20,482		
Master's Health Physics	137	\$83,303	\$82,500	\$147,500	\$32,500	\$19,678		
Master's Other Field	35	\$84,214	\$ 77,500	\$152,500	\$52,500	\$22,457		
Master's Nuclear Engineering	22	\$85,455	\$82,500	\$117,500	\$57,500	\$17,705		
Ph.D. Health Physics	20	\$86,750	\$87,500	\$137,500	\$32,500	\$26,570		
Ph.D. Other Field	23	\$95,326	\$92,500	\$142,500	\$72,500	\$20,216		
Ph.D. Nuclear Engineering	16	\$80,625	\$80,000	\$127,500	\$57,500	\$16,419		

Table 3: CHPs by Education and 6-15 Years Experience

Edu & 6-15 Yrs Experience	Count	Average	Median	Max	Min	Std Dev
Bachelor's Health Physics	10	\$ 67,000	\$ 65,000	\$ 92,500	\$ 37,500	\$15,890
Master's Health Physics	46	\$ 72,935	\$72,500	\$112,500	\$ 37,500	\$ 15,699
Ph.D. Health Physics	11	\$71,591 ·	\$ 67,500	\$102,500	\$ 32,500	\$20,593
Ph.D. Nuclear Engineering	8	\$ 82,500	\$80,000	\$127,500	\$57,500	\$20,529

Table 4: CHPs by Education and >15 Years Experience

Edu & >15 Yrs Experience	Count	Average	Median	Max	Min	Std Dev		
Bachelor's Health Physics	8	\$ 83,750	\$82,500	\$107,500	\$47,500	\$19,594		
Bachelor's Other Field	24	\$83,750	\$83,750	\$ 137,500	\$ 37,500	\$21,430		
Master's Health Physics	90	\$88,556	\$87,500	\$147,500	\$ 32,500	\$19,581		
Master's Nuclear Engineering	15	\$88,500	\$92,500	\$117,500	\$57,500	\$ 19,011		
Ph.D. Health Physics	9	\$105,278	\$102,500	\$137,500	\$77,500	\$21,082		
Ph.D. Other Field	21	\$97,024	\$92,500	\$142,500	\$ 72,500	\$20,366		
Ph.D. Nuclear Engineering	8	\$78,750	\$80,000	\$97,500	\$57,500	\$12,174		

Table 5: CHPs by U.S. Regions*

CHPs by Region	Count	Average	Median	Max	Min	Std Dev
Northeast	34	\$82,794	\$82,500	\$122,500	\$52,500	\$14,352
Midwest	46	\$81,087	\$75,000	\$142,500	\$ 32,500	\$23,301
South	96	\$82,865	\$80,000	\$152,500	\$32,500	\$19,924
West	104	\$ 85,144	\$82,500	\$147,500	\$ 52,500	\$17,557

* The four major regions of the United States as defined by the U.S. Census Bureau for which data are presented represent groups of States as follows:

Northeast. Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island,

Vermont.

Midwest. Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota,

Wisconsin.

South. Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland,

Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, West Virginia.

West. Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah,

Washington, Wyoming.

Table 6: CHPs by Education and NRRPT

Education & NRRPT	Count	Average	Median	Max	Min	Std Dev
Bachelor's Health Physics	8	\$70,625	\$70,000	\$92,500	\$ 47,500	\$13,871
Bachelor's Other Field	12	\$73,750	\$ 72,500	\$97,500	\$37,500	\$17,468
Master's Health Physics	15	\$82,500	\$77,500	\$127,500	\$ 42,500	\$20,000

Table 7: Master's Health Physics and Primary Employer

Table 1. Waster & Mearth I hysics and I i mai y Employer							
Masters Health Physics	Count	Average	Median	Max	Min	Std Dev	
& Primary Employer							
Consulting Firm	14	\$82,857	\$85,000	\$142,500	\$57,500	\$21,255	
Commercial	[4	\$ 92,500	\$85,000	\$ 142,500	\$62,500	\$25,268	
Federal Government	21	\$82,976	\$77,500	\$132,500	\$37,500	\$20,670	
Government Contractors	19	\$86,711	\$82,500	\$147,500	\$57,500	\$22,989	
National Laboratory	24	\$86,667	\$90,000	\$107,500	\$52,500	\$15,228	
Nuclear Power Facility	20	\$80,750	\$77,500	\$107,500	\$62,500	\$13,599	
University	14	\$79,286	\$82,500	\$92,500	\$62,500	\$11,026	

Table 8: Master's Nuclear Engineering and Primary Employer

Master's Nuclear Engineering & Primary Employer	Count	Average	Median	Max	Min	Std Dev
National Laboratory	9	\$84,722	\$82,500	\$107,500	\$57,500	\$ 15,635

Table 9: Master's Health Physics and Primary Job Responsibility

Table 3. Master 3 II	, 000 x 200	Poggini	-,			
Master's Health Physics &	Count	Average	Median	Max	Min	Std Dev
Primary Job Responsibility						
Administration	13	\$93,654	\$87,500	\$ 147,500	\$ 67,500	\$23,018
Applied Health Physics	47	\$81,968	\$82,500	\$142,500	\$ 32,500	\$19,231
Dosimetry	10	\$80,000	\$77,500	\$97,500	\$ 72,500	\$ 9,501
Environmental	13	\$78,654	\$ 72,500	\$112,500	\$37,500	\$21,713
Regulations/Standards	13	\$82,885	\$87,500	\$ 132,500	\$47,500	\$21,934
Reactors, Power	10	\$84,500	\$82,500	\$ 107,500	\$ 62,500	\$14,376

Table 10: CHPs with Medical Physics as Primary Job Responsibility

Medical Physics Primary Job	Count	Average	Median	Max	Min	Std Dev
Medical Physics CHPs	8	\$91,875	\$95,000	\$132,500	\$52,500	\$28,963

Table 11: CHPs as Professional Staff (All CHPs in this category and by Education)

Medical Physics Primary Job	Count	Average	Median	Max	Min	Std Dev
All CHPs in this Category	167	\$78,518	\$77,500	\$ 132,500	\$ 32,500	\$17,429
Master's Health Physics	71	\$75,810	\$72,500	\$132,500	\$ 32,500	\$16,079
Master's Other Field	18	\$80,000	\$77,500	\$102,500	\$57,500	\$12,862
Master's Nuclear Engineering	14	\$86,786	\$85,000	\$117,500	\$57,500	\$16,740
Ph.D. Health Physics	10	\$69,000	\$65,000	\$ 97,500	\$ 32,500	\$19,586
Ph.D. Other Field	14	\$91,071	\$85,000	\$132,500	\$72,500	\$ 17,588

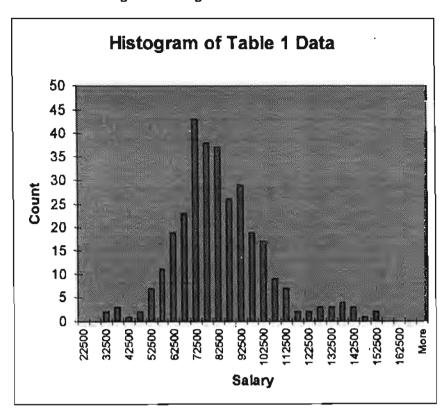


Figure 2: Histogram of Table 2 Data, Masters Health Physics CHPs

