FINDINGS FROM THE SURVEY OF PARTICIPANTS OF THE 2004 JOINT ANNUAL CONFERENCE OF THE NATIONAL SOCIETY OF BLACK PHYSICISTS AND THE NATIONAL SOCIETY OF HISPANIC PHYSICISTS

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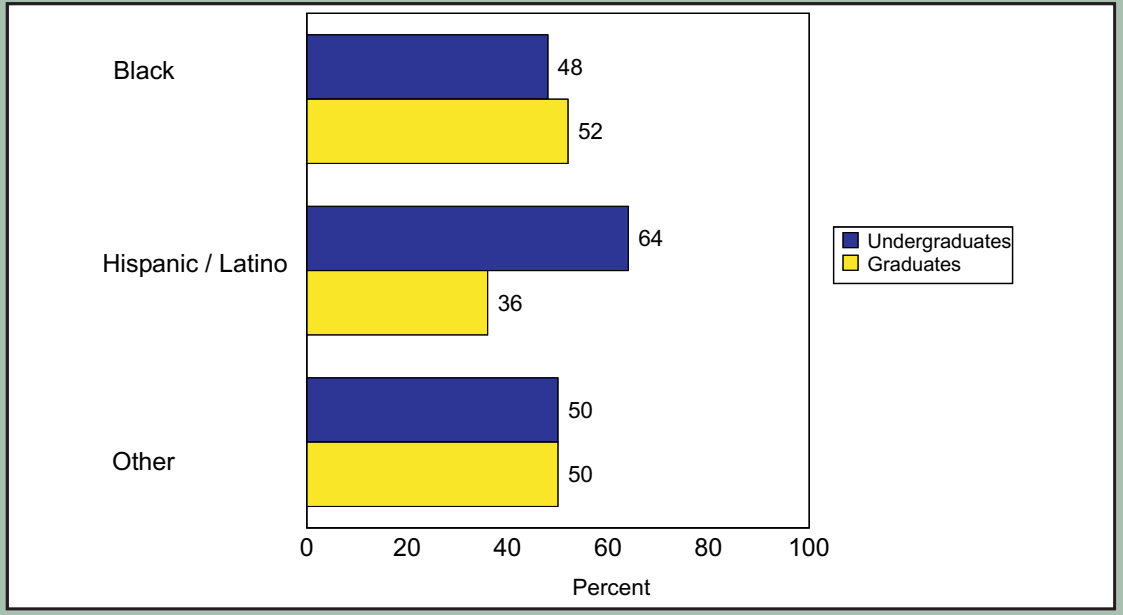
INTRODUCTION

The 2004 joint annual Conference of the National Society of Black Physicists (**NSBP**) and the National Society of Hispanic Physicists (**NSHP**) was held in Washington, DC during the weekend of February 18th-21st, 2004. This conference, held jointly for the first time this year, provided the over 300 African-American and Hispanic-American physics students with the unique opportunity to meet and network with working minority physicists. Also in attendance were graduate school and corporate recruiters, administrators, faculty members, and various professional society representatives. As in previous years, the Conference organizers contracted with the Statistical Research Center of the American Institute of Physics to conduct an evaluative study of the meeting.

The questionnaire instrument was designed by the Statistical Research Center's staff and the **C**onference organizers, and structured to allow comparison with the responses of participants from the previous year. Conference participants were asked to provide information on their academic background as well as demographic characteristics. They were also asked about their physics research experience, career goals, their participation in various nationally-sponsored internships and support programs, challenges faced in their academic pursuits, and ratings of various aspects of their Conference experience.

The 6-page questionnaire was distributed at the Conference. Around 312 students attended the

Figure 1. Race by student status of the NSBP / NSHP student participants, 2004.



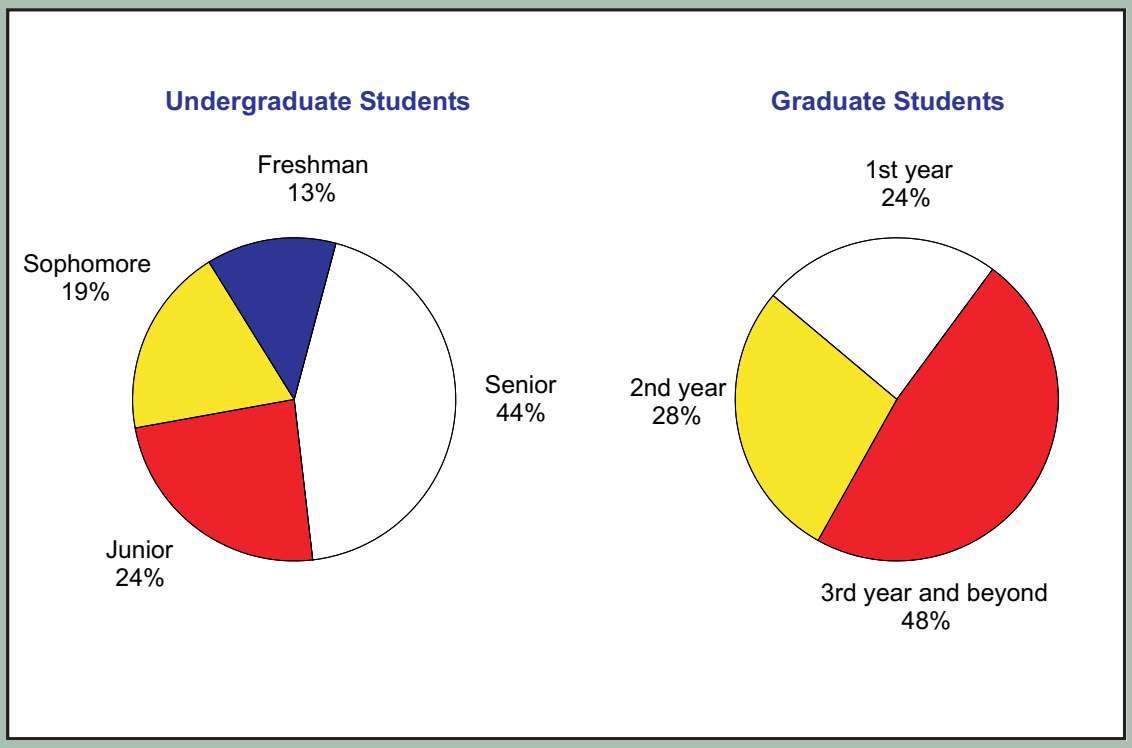
Conference and were given the survey to complete. Responses were collected on the last night of the Conference, with 147 (47%) returning completed questionnaires.

DEMOGRAPHIC BACKGROUND OF PARTICIPANTS

Student attendees at the Conference were asked to provide data on various aspects of their background and demographic characteristics. The vast majority of the students (88%) identified themselves as African-American, 8% identified themselves as Hispanic-American, and 4% identified themselves as other (**Figure 1**).

We found that the students at this year's Conference were almost evenly split in terms of their level of study. Forty-nine percent of the respondents this year said that they were undergraduates, and 51% reported being graduate students. Last year, there was a much higher proportion of undergraduate student participants present at the Conference (65% versus 35% for graduate attendees). However, as was the case in the previous conference, both undergraduate and graduate students tended to be concentrated at the upper-end of their respective levels. Thus, slightly more than two-thirds of the undergraduate participants were upperclassmen, while slightly more than three-quarters of the graduate attendees, up from half last year, were beyond their first year (**Figure 2**).

Figure 2. Class standing of NSBP / NSHP student participants, 2004.

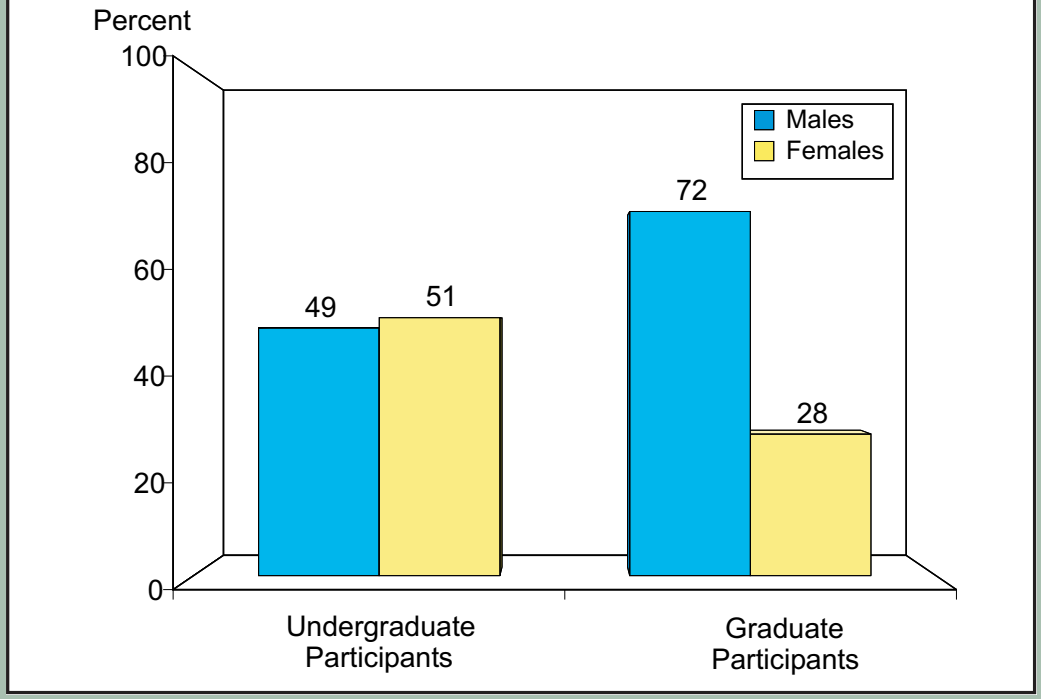


The overall median age was 24 years. The median age for undergraduates was 21, while for graduate participants it was 28 years, both virtually the same as last year. As before, there was no age difference between undergraduate males and females, but we did find a slight age difference between graduate male and female students, with ages of 29 and 27 years, respectively.

Students were also asked to provide us with gender data, and once again we found that women were well represented at this year's Conference (**Figure 3**). The overall proportion of female respondents was 40%, virtually identical to last year. Among undergraduates, the number of women actually exceeded the number of men. Among graduate students, the proportion of Conference participants who were female was 28%, slightly higher than the national average for all physics graduate students.

Conference attendees were queried on the minority composition of the high school they attended, of their undergraduate institution, and where applicable, of their graduate institution (**Figure 4**). Students for the most part came from minority-majority schools. Once again, we discovered that almost two-thirds of the respondents had attended minority-majority high schools, and almost as many (61%) reported going, or having gone, to a minority-majority undergraduate institution.

Figure 3. Sex by student status of NSBP/ NSHPstudent participants, 2004.



Although around two-thirds of the graduate students were likely to have gone to minority-majority high schools and colleges, currently slightly more than half of them indicated that they were attending predominantly white graduate institutions.

Male undergraduate participants were much more likely than their female counterparts to be attending minority-majority colleges and universities. Among graduate students, females, like last year, were more likely than males to have come from minority-majority high schools and colleges. They were also more likely than men to be attending a minority-majority graduate institution (**Table 1**).

Respondents were asked what minority group had the greatest representation at their high schools, undergraduate institution, and again where applicable, graduate institution. Not surprising, given the racial make-up of the Conference participants, the minority group that had the most representation at all three academic levels was African-American. At their high schools and colleges, the overwhelming majority (around 84%) reported that African-Americans had the most representation, with Hispanic-Americans coming in a very distant second. However, at the graduate level, less than two-thirds of the respondents reported that African-Americans was the minority group with the most representation, while 22% of them indicated Asians as the minority group with the most representation.

Figure 4. Minority composition at respondents' high school, undergraduate, and graduate institution of NSBP / NSHP student participants, 2004.

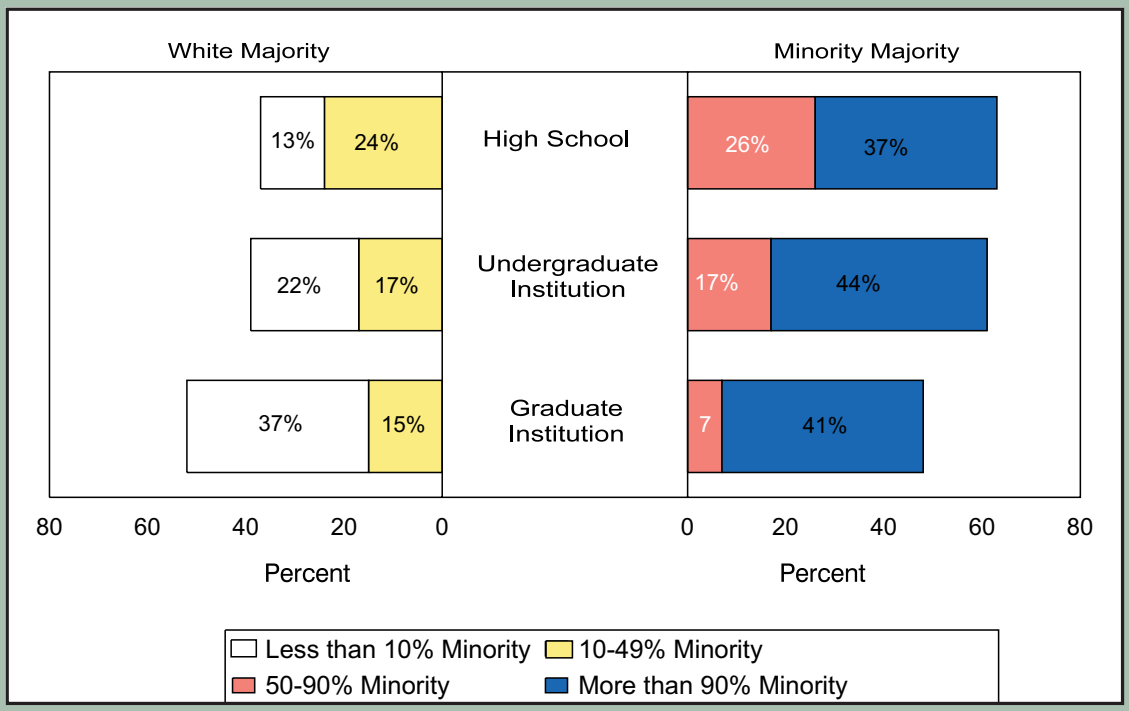


Table 1. Minority composition at the high school and college and graduate institution of NSBP / NSHP student participants, 2004.				
	Undergrad Males %	Undergrad Females %	Grad Males %	Grad Females %
White majority high school	39	39	38	26
Minority majority high school	61	61	62	74
White majority college	33	47	41	30
Minority majority college	67	53	59	70
White majority college	-	-	55	42
Minority majority college	-	-	45	58

Participants were also asked about previous conference attendance. More than a third of the respondents indicated that they had attended previous conferences for minority physicists or physics students. However, more than two-thirds of the undergraduates and around half of the graduate students this year were new to such conferences. Not surprisingly, given the location of the Conference, we discovered that there was a high proportion of students coming from schools located in the South.

PHYSICS & SCIENCE BACKGROUND

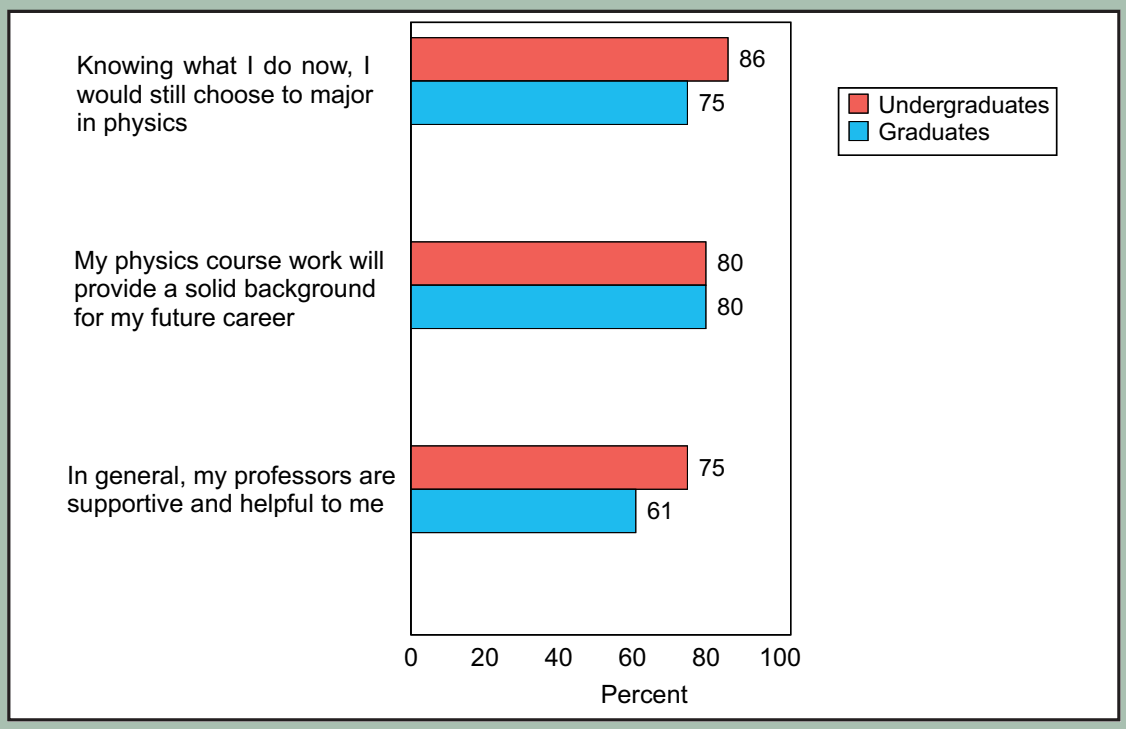
The survey asked students what their current major was, with 82% reporting physics as their major, 8% indicating engineering as their major, and another 10% mentioning another science discipline. Students were then asked how they felt about their choice of majors, the courses they had taken, and the professors they had encountered during their academic careers. The high degree of satisfaction with their chosen field of study is reflected by the proportion of physics students (83%) who reported that given what they know now, they would still major in physics if they had to do it over. Just as many students (81%) believed that their course work would provide a solid background for their future careers, and slightly more than two-thirds of them felt that the professors they had encountered were generally supportive and helpful.

As was also the case last year, a few differences by degree level and gender showed up (**Figure 5**). Surprisingly, this year we found that the undergraduate students were more satisfied

with their field of study than their graduate counterparts. While the overwhelming majority (86%) of the undergraduate participants said that given what they know now, they would still major in physics, a quarter of the graduate participants did not share this feeling. Undergraduate students also felt more positive than their graduate counterparts about the professors they had encountered (75% for undergraduates versus 61% for graduate students). We found these sentiments to be also shared by students at Historically Black Colleges and Universities (**HBCUs**). Over three-quarters of them felt that their professors had been supportive and helpful, while only 59% of the students at non-HBCUs agreed with that feeling. Students at HBCUs, on the other hand, were less likely to believe that their physics course work would provide a solid background for their future careers (72% versus 82% for non-HBCU students).

Along similar lines, male undergraduate students were far more likely to believe that their physics course work would provide a solid background for their future careers (91% versus 71% female undergraduates, and 80% for graduate students of both sexes). Curiously, the vast majority of female undergraduate participants reported that even knowing what they do now, they would still major in physics again (91% versus 81% for male undergraduates, 76% for male graduate students, and 75% for female graduate students).

Figure 5. Extent to which NSBP / NSHP student participants agree with the following statements, 2004.



As was also true last year, the majority of participants, both undergraduates and graduate students, indicated that they had some type of research experience (**Figure 6**). As expected, almost three-quarters of the graduate students reported having had experience as part of a physics course, whole for undergraduates the proportion was 38% (versus 20% last year). Graduate student respondents were also more likely than their undergraduate counterparts to have had a regular research job (41% versus 22% for undergraduates). Not surprisingly, given that they are older and generally at a more advanced stage in their studies, male graduate students were more likely than any other group at the Conference to have been a research assistant for a professor (78% versus 55% for female graduate students, 36% for male undergraduates, and 40% for female undergraduates).

We also found that both graduate and undergraduate students at HBCUs were more likely than their non-HBCU counterparts to have been research assistant for a professor (67% versus 48%). This close working relationship may be part of the explanation for the more positive feelings HBCU students at all levels had towards their teachers. HBCU participants were also more likely to have had an off-campus position or internship that included a physics research component (40% for HBCU students versus 28% for non-HBCU students).

Conference attendees were also asked more specifically about their knowledge of and participation in any nationally-sponsored internship programs (**Table 2**). The most popular program, chosen by one-fourth of all respondents, was the National Science

Figure 6. Proportion of undergraduate and graduate attendees reporting different types of physics research, 2004.

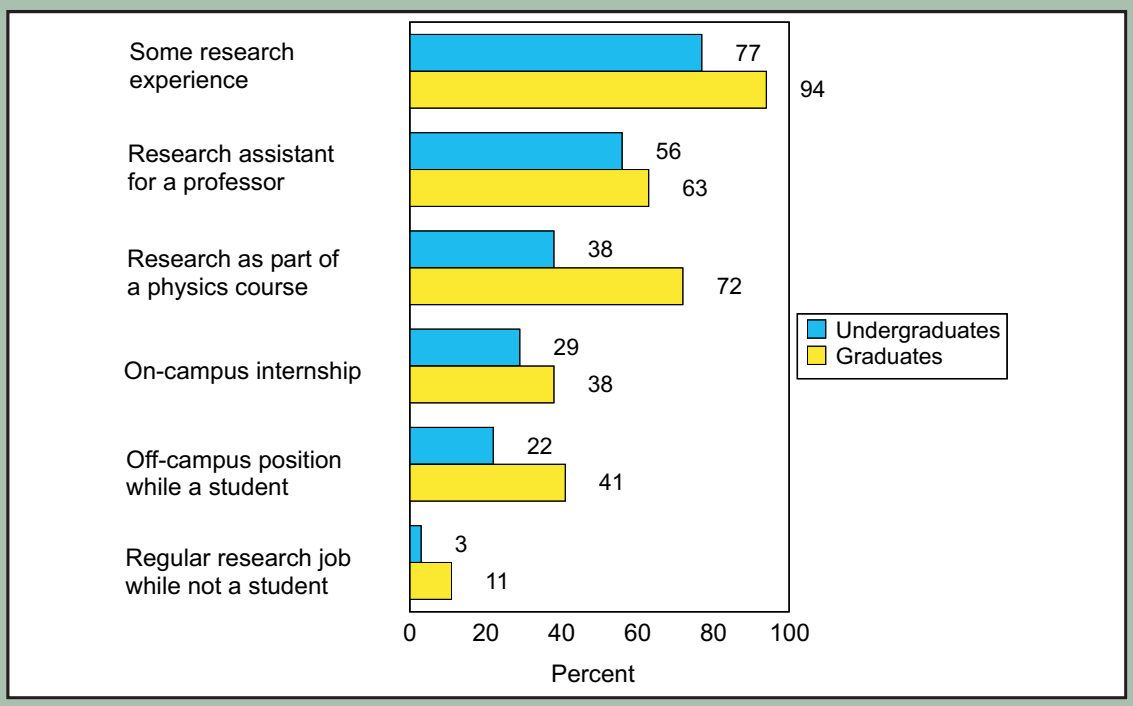


Table 2. Percent of NSBP/ NSHP respondents' who have participated with or are aware of scholarships & fellowships with the following government agencies, 2004.				
	Did participate %	Heard of but did not participate %	Heard of at this meeting %	Never heard of program %
National Science Foundation				
Research Experiences for Undergraduates	26	39	8	27
Louis Stokes Alliances for Minority Participation	17	21	8	54
Graduate Research Fellowship Program	5	50	8	37
Alliances for Grad. Educ. and the Professoriate	5	18	14	63
Nanoscale Science and Engineering Educ.	2	18	12	68
Integrative Grad. Educ. and Research Traineeship	2	20	10	68
Robert Noyce Scholarship Program	1	9	10	80
Department of Energy				
Science Undergraduate Lab Internships	5	21	17	57
Faculty and Student Teams	2	19	12	67
Pre-Service Teacher	1	17	9	73
Community College Institutes	-	12	13	75
National Institutes of Health				
Summer Internship Programs in Biomed. Research	2	21	15	62
Predoctoral Fellowship Awards for Minority Students	1	25	11	63
Undergrad Scholarship Program	-	18	15	67
Initiative for Minority Students - Bridge to PhD	-	14	16	70
Initiative for Minority Students - Bridge to Bachelors	-	15	16	69
Department of Education				
Graduate Assistance in Areas of National Need	5	16	10	69
R.E.McNair Postbaccalaureate Achievement Program	5	35	10	50

Foundation (NSF) sponsored Research Experience for Undergraduates. The second most popular internship program was the NSF's Louis Stokes Alliance for Minority Participation. The third most popular program was a tie between the NSF's Alliances for Graduate Education, and the Department of Energy's Science Undergraduate Laboratory Internships. Student participants for the most part had been totally unaware of a majority of

these nationally-sponsored internship programs. This strongly suggests that a more concerted effort to get this information out to more students would help them take advantage of all the opportunities available to them.

GOALS & ASPIRATIONS

Regardless of their current level of study, conference participants overwhelmingly indicated a desire to obtain a graduate degree, with 85% of them (versus 79% last year) hoping to attain a PhD. As was also true last year, almost two-thirds of the respondents reported that they wanted to pursue careers in physics research or teaching, including 14% who indicated an interest in physics research but were unsure which employment sector they preferred.

Table 3 illustrates the different types of physics careers students were interested in pursuing. As we found at the previous conference, one of the big differences was that graduate students were more likely to favor careers in academe. Undergraduates, on the other hand, were more likely to indicate an interest in working at government or national laboratories. Male respondents were definitely more focused on physics research in industry (20% versus 2% for female respondents), while females seemed to gravitate towards careers in government or national labs (21% for females versus 11% for male participants). Another difference was that male students were more likely to indicate an interest in physics research while still expressing uncertainty about which employment sector they preferred (19% for males versus 7% for females). Similarly, a higher fraction of students at HBCUs reported a preference for physics research but were unsure which employment sector they favored (19% for HBCUs versus 9% for non-HBCU students).

Table 3. Anticipated career goals of NSBP / NSHP student participants, 2004.

	Undergraduates %	Graduates %
Academic teaching or research in physics	19	42
Physics research in industry	9	17
Physics research in government / national labs	21	9
Physics research in unspecified employment sector	17	11
Military service	2	1
Other types of physics-related positions	12	10
Careers in other sciences	12	9
Careers outside of physics altogether	8	1

Participants at the NSBP conference were again queried about their interest in doing an internship, and in what setting they would prefer to do one. Like last year, the vast majority of them reported an interest in doing an internship. Interestingly, male graduate students were the least likely to want to do an internship (72% versus 80% for female graduate students, 94% for male undergraduates, and 91% for female undergraduate students).

Although participants, for the most part, were in accord when it came to doing an internship, they differed greatly in terms of what setting they most preferred. Overall, almost half favored national labs, while only 17% favored an academic setting and 11% favored corporate labs. There were generally no differences among the groups at the Conference when we controlled for gender and level of study. The two exceptions were that the undergraduate male respondents seemed somewhat more likely to favor an internship in a corporate setting, whereas graduate male respondents seemed to gravitate towards internships at national labs.

Conference attendees were further asked to indicate the motivation underlying their choice of career goals (**Table 4**). The most common reason, ranked number one by 42% of the respondents, was the intrinsic challenge of the work. The chance to give something back to the community, in first place last year, came in a very close second. On the other hand, only 8% of all attendees indicated that salary and benefits were the most important factors for them.

Male undergraduate students were somewhat less concerned with giving something back to the community compared with the other 3 groups at the Conference (33% versus 46% for female undergraduates, and 45% for graduate students of both sexes). At the other extreme,

Table 4. Main factor that led NSBP / NSHP student participants to their choice of career goal, 2004.

	Overall %	Undergrad Males %	Undergrad Females %	Grad Males %	Grad Females %
Challenging or interesting work	42	52	31	37	50
Chance to give something back to the community	41	33	46	45	45
Salary and benefits	8	9	9	10	0
Respect people have for this type of work	5	3	11	2	5
Other	4	3	3	6	0

none of the female graduate students pointed to salary and benefits as being the main impetus for choosing their career goals. Curiously, we found that both male undergraduate students and female graduate students were much more likely to be concerned with the intrinsic challenge of the work than the other two groups (52% for male undergraduates, 50% for female graduates, versus 31% for female undergraduates, and 37% for male graduate students).

Respondents were again asked to provide us with the most important factors that helped them to persist in their physics studies (**Table 5**). As in the previous year, love of the subject matter was ranked the number one reason by more than a third of the respondents, while support from minority faculty came in second and peer support from other minority physics students came in third.

Also like last year, we found these feelings not to be evenly distributed among the different participants. Female students were more likely to emphasize family support (15% versus 4% for male students), while male students, on the other hand, seemed to stress support from minority faculty members (22% for males versus 12% for female students). Not surprisingly, graduate students were especially likely to cite love of the discipline as the top factor (44% versus 30% for undergraduates). This sentiment was also surprisingly shared by students who were attending non-HBCU schools. Almost half of them emphasized that love of the subject matter was the important factor that helped them to persist in their physics studies.

On the flip side, Conference participants were also asked to name the factors that had challenged them in their academic pursuits

Table 5. Factors that have helped NSBP/NSHP student participants persist in their studies, 2004.

	Top Factor %	Among Top 3 %
Love of subject matter	36	63
Support from minority faculty members	18	40
Support from other minority students	16	45
Family support	9	42
Support from non-minority faculty members	6	30
Career prospects	4	30
Support from minority professional societies	4	17
Support from other non-minority students	4	12
Support from non-minority professional societies	-	7
Other	2	5

(**Table 6**). Once again we found that the ability (currently for undergraduates and in the recent past for graduate students) to finance their undergraduate education was ranked the number one challenge by almost a third of the respondents. Concern about the job market for physics degree holders, number three last year, was ranked number two this year. And concerns about passing the PhD qualifying exams was ranked number three by respondents.

Not surprisingly, undergraduate students seemed, in general, most concerned with the ability to finance their undergraduate education (47% versus 18% for the second-ranked choice, finding a job with a physics degree). Graduate students, while they seemed most concerned with the PhD qualifying exams (22%), still ranked the problems they faced in paying for their undergraduate education above other factors. Concerns about financing their graduate education was less of an issue, probably because of the funding support most enjoyed.

Respondents were asked to supply some potential ways to interest other minority students in majoring in physics. Organizing popular talks to demonstrate how interesting physics can be was ranked the best way to interest other minority students into the field of physics. In second place was the forgiveness of student loans, followed by raising awareness about the availability of scholarships for undergraduates.

Table 6. Challenges NSBP / NSHP student participants faced in their academic pursuit, 2004.

	Top Challenge %	Among Top 3 %
Undergraduate		
Ability to finance undergraduate education	47	65
Graduate		
Ability to finance undergraduate education	19	29
Ability to finance graduate education	15	25
Concern about passing qualifying PhD exams	22	54
All		
Concern about the job market	18	57
Compatibility with the people or culture of physics	10	43
Ability to find a research advisor	6	34
Other	7	23

ASSESSMENT OF THE CONFERENCE

Besides presenting a profile of the participants, their experiences in physics education, and their reasons for attending the Conference, the survey also solicited their assessment of the Conference and its relevance to their needs. As part of the latter, participants were asked their specific objectives for attending and whether the Conference was effective in meeting those objectives.

As was the case last year, networking with minority professionals remained the most important objective, cited as number one by almost a third of all respondents (**Table 7**). Again, networking with other minority students came in second, with more than one-quarter of the students reporting this as their main reason for attending the Conference. Learning about further study in physics came in third with one-fifth of the participants choosing this as their primary motivation for attending.

Not surprising, we found that students at non-HBCUs were more interested than their HBCU counterparts in networking with other minority physics students (32% versus 21% for HBCU students). Graduate students of both sexes, were also more interested in networking with other minority physics students (32% for graduate students versus 22% for undergraduates).

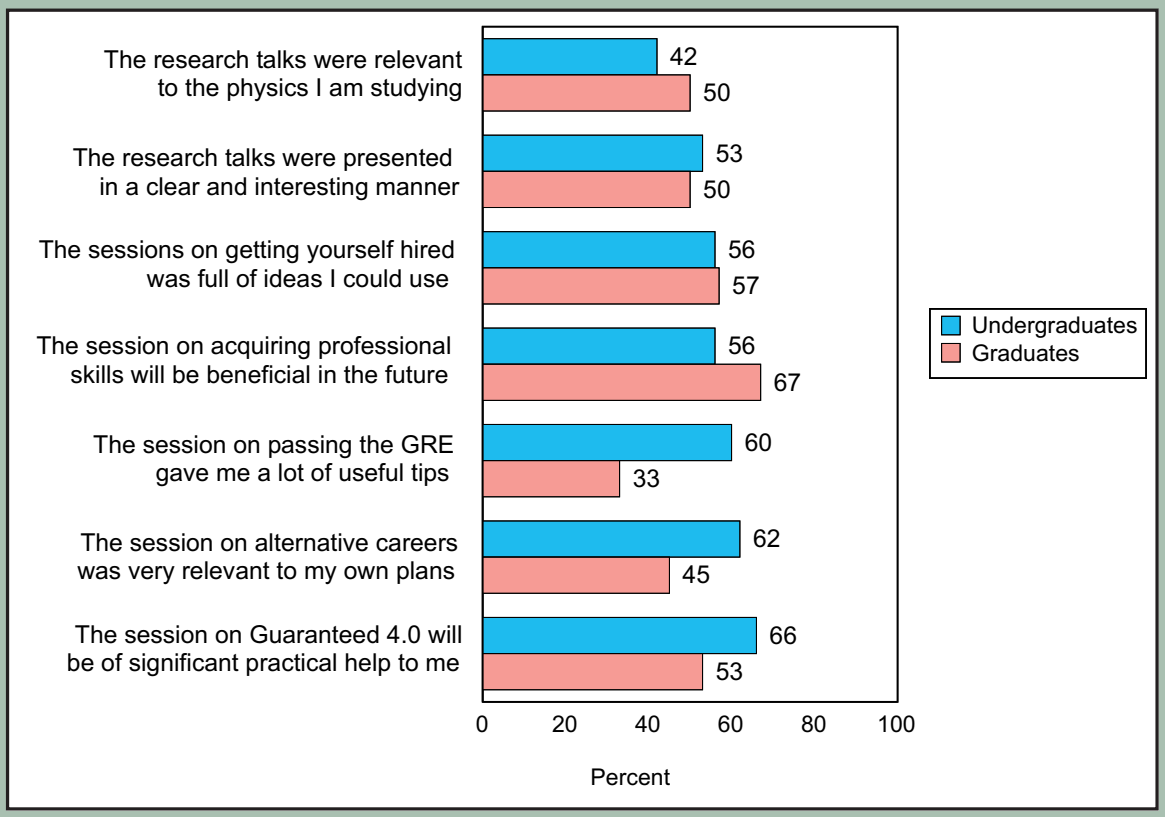
The evaluation of the Conference and its various aspects once again gives us clear evidence of the success the Conference has had on the participants. Despite the wide range of participants' backgrounds, all of the sessions came out with positive ratings overall, and none were rated negatively by more than a sixth of the respondents (**Figure 7**).

Predictably, we discovered that a greater proportion of the graduate students felt that the contents of the research talks were directly relevant to the physics they were studying (45% versus 29% for undergraduates). They also felt that the research talks were presented in a clear and interesting manner (64% versus

Table 7. Goals in attending NSBP / NSHP conference, 2004.

	Top Goal %	Among Top 3 %
Networking with minority professionals	31	85
Networking with other minority students	27	76
Learning about further physics study	20	50
Meeting with recruiters	18	54
Hearing research talks	4	31
Other	1	4

Figure 7. Extent to which NSBP / NSHP participants agree with the following statements, 2004.



49% for undergraduates). Surprisingly, given the fact that very few of them indicated a desire for a career outside of physics, a higher proportion of graduate students indicated that the session on alternative careers was very relevant to their own plans (47% versus 33% for undergraduates).

Given the fact that the graduate students are for the most part beyond their first year, it is understandable that most felt that the "Guaranteed 4.0" session was not very beneficial to them. Students at HBCUs were more positive about the session on alternative careers (45% versus 34% for students at non-HBCUs), as well as the session on acquiring professional skills (60% versus 50% for non-HBCU students). They were also more enthusiastic than students at non-HBCUs about the session on how to get yourself hired (51% for HBCU students versus 36% for non-HBCU students).

Participants were also queried on how successfully the Conference fulfilled the various goals students had when they decided to attend. One measure of the Conference's effectiveness is that overall, every goal mentioned received an excellent or good rating from over 80% of the respondents. The most highly rated aspect was the opportunity to learn about further study in physics (**Table 8**). Networking with other minority physics students came in second, and networking with minority professionals came in third.

HBCU students gave especially high marks to the opportunity to network with minority professionals (94% versus 80% for students at non-HBCUs). Interestingly, we found that a higher proportion of male students took advantage of the opportunity to hear research talk (89% versus 77% for female students). Although the goals of hearing research talks and meeting with job recruiters were not one of the main objectives for attending the Conference, they both still got very high ratings from all the respondents.

CONCLUSIONS

Although the students had an array of different goals and objectives for attending this year's NSBP meeting, the findings reported on above attest to the fact that in most ways the Conference was quite successful in meeting their expectations and fulfilling those goals. A fuller sense of the of the positive impact of the Conference on students can be gleaned from a sampling of the many overwhelmingly enthusiastic comments offered at the end of the questionnaire. As one student put it,

> *This conference is an excellent opportunity for students to network with professionals. The advice, motivation, and knowledge gained by attending this conference is very valuable.*

On a more personal note, another participant wrote:

> *The opportunity to attend this conference was a true blessing. The people I've met and things I've learned here will give me the strength to return to and finish my studies at my institution.*

Table 8. Success of the Conference in meeting the goals of the NSBP / NSHP student participants, 2004.

	Excellent %	Good %	Fair %	Poor %
Networking with other minority students	65	27	8	0
Networking with minority professionals	60	27	13	0
Learning about further physics study	50	44	6	0
Meeting with recruiters	48	41	11	0
Hearing research talks	39	47	12	2
Other	25	50	0	25

This material is based upon work supported by the National Science Foundation under Grant No. 0400699, as well as similar grants by the National Astronomical and Space Agency, the Office of Naval Research, the Army Research Office, and the various contractor operated DOE National Labs.

VERBATIM COMMENTS

Question 9A What impact did that attendance have on you?

I was inspired by past and current achievements of my community. Wonderful networking opportunity.

Provide guidance in career choices, interaction with people who are the experts in their fields.

I felt encouraged to continue in science.

Positive, motivating.

It got me more involved with finding a suitable graduate school, and narrowing down my field of study.

Advice, information, networking & best practices for each step in the process of becoming a physicist.

It improved my approach to research problems.

Networking with peers and senior physicists.

I found mentors in the field of physics I am most interested in.

A great motivator to continue on.

Contacts, new info.

It's an inspiration and enjoy seeing Black physicists.

Boost of motivation to continue in physics towards PhD level.

I was able to see fields and gain understanding of subjects I previously hadn't considered.

Motivated me to excel in physics.

Refreshed; motivation to continue and be the best.

It gave me the opportunity to know the requirements for grad school and how I can meet those requirements.

It encourages me to keep going especially when it seems easier to quit.

Networking with professionals within my field and other students.

I think we need to stand out and network in order to survive as minorities. Titles should not be put on our name tags. Continue with this conference (organization).
Gained an internship; met other young scientists.

It had a positive affect on me. It showed me that there are some intelligent black brothers and sisters.

It motivated me to continue my education in physics.

First time to see so many black physicists.

Helped me stay focused in physics, helped me to make contacts and network with others in the field.

Gave me the opportunity to network with other students and professionals.

Positive impact. I felt very much at home and encouraged to continue my education.

Made me change my major from Electrical Engineering to Physics.

To continue pursuing physics.

To move ahead and make a contribution to society.

I was able to see more opportunities in physics.

Internship opportunity, graduate school opportunity.

I established networks that will last throughout my academic career.

I have since decided to go to graduate school.

This conference motivated me to attend graduate school in physics.

I made contacts at schools of interest.

More optimistic in physics studies. Feel myself member of black scientists.

Was an eye-opening experience.

Learning to network.

I learned a lot; very informative.

I met a lot of undergraduates like myself, and networked with physicists and companies.

Attending this conference helped me realize how far as a people we've come and how much further we need to go.

The one-on-one conversations with students and faculty has proven to be extremely informative and inspirational.

Very inspiring.

Great impact, I was able to get an internship.

Various, but all positive.

Internship opportunities, networking, guaranteed 4.0 advise.

The opportunity to meet other physicists and physics students and get information on subdisciplines of physics.

Simply breath-taking, awe-inspiring and life changing.

Networking and motivation.

Inspiration.

It sparked my interest and opened me up to a world of physics that I never knew existed.

Overwhelming opportunities for internships and graduate programs/ networking.

Job opportunities.

Being a black physicist never seemed more possible than it does now.

Did a bit of networking and boosted my confidence in talking about my research with others.

It was an invigorating experience. I loved meeting people, and I made friends.

Encouraged me to go to grad school, helped me network with professionals and like-minded students.

They always seem to motivate me to become a better physicist.

Question 9B What motivated you to attend the conference?

See different areas of research currently being conducted.

My advisor.

To learn more about physics from professionals who have experience in the field and learn about internships.

The extreme need for minorities to help each other in areas like physics by providing useful information, scholarship, and career advice.

With a BS in Chemical Engineering and new grad student in Materials Science at Norfolk State, I wanted to begin to network with other MS/PhD students and professional that are working in diverse fields.

Research opportunities.

Friend of mine.

I was informed that this was a good conference to network at.

Being a black physics major I could not miss the conference (after hearing about it).

The interaction with other minority students to share research ideas.

Friend's recommendation.

Fellow student. Opportunity to meet other minorities in the field.

Dr Hill and David Copefield at the University of Maryland - College Park. Did not know about it till they told me.

I heard of it, and thought it might be interesting.

Meet black physicists to discuss different problems we encounter in this field.

The cheer existence of it; the chance to meet people like me.

Physics teacher recommended it to meet new people.

Availability of funds.

I have a physics background and wanted to share the experience.

It was local.
I was interested in experiencing this conference.

The chance for research experience.

I wanted to connect with other scientists and researchers.

I was invited by a professor.

I thought it was important to network.

I'm a physicist and wanted to take advantage of the opportunity.

I know I would make important contacts that may help me in the future.

To get a better understanding of the opportunities for black physicists.

It encouraged me to try harder in my classes and excel.

Invitation from Lawrence Norris. Never knew about NSBP until he told me about conference.

Advising and networking opportunities. It's the first year I knew about it.

In an effort to make our department more hospitable to minority students, I wanted to come and learn about issues facing black and hispanic students and learn about how minority serving institutes support and nurture these students.

A chance to present my research.

Encouragement as one of the top physics majors in my school; funding to come.

Curiosity.

Physics faculty and friend.

My motivation was that I was the only black physics major I know.

The networking opportunities and the learning experience that is available.

Curiosity and mentor support.

The internships and employment opportunities.

Students at my college (Grinnell).

It was the first time I'd heard about a physics conference, so I had to see it for myself.

I was interested in how the physics conference runs and the different workshops available.

Additional Comments

This conference is an excellent opportunity for students to interact with professionals. The advice, motivation, and knowledge gained by attending this conference is very valuable.

I like this conference very much.

It's nice to have moderators for the student panels – the sessions got a little rowdy (in a good way), and some questions got lost. A little order might be nice!

Great conference.

Excellent conference. Great to see such brain power concentration.

The opportunity to attend this conference was a true blessing. The people and things I have met and learned here will give me the strength to return to and finish my work at my institution.

Poster sessions should have prizes. Abstracts should be better listed. Name badges should specify persons level (i.e. grad, undergrad, postdoc, etc).

Excellent exposure.

The lack of financial support in undergrad is what I feel is the cause for my late start in graduate school -- because I had to take a long break to work and pay my debts. Helping (financially) good students in sciences will only increase our presence in advance studies institutions.

It has been a great experience.

The one thing that almost stopped me from entering into the physical sciences was the fear of losing my identity. All the mentoring programs I participated in made me feel that even though I was smart enough, I wasn't good enough. My brain could do physics but I couldn't be me. People from my projects felt that we should become scientists that represent the face of black youth that are usually only shown doing crime or lazy etc....

This conference has made a great change in my life. I have never been around this many physicists, especially minority physicists. On campus the physics majors are the minority because there are only 5 of us. This conference has given me hope and motivation. It has given me that extra push that I needed. Thank you kindly NSBP.

Speakers who give talks often gave informative talks, however, they sometimes forgot that there are younger people here who know little of their research. Just because the presenters care, it does not directly apply to the student listeners. Speakers should give at least one background and application slide. I believe making people care about what you're presenting is very important. It would also give more students a reason to attend the talk sessions.

I enjoyed the conference very much. The only suggestion I would recommend is to have shorter sessions in order to have more topics discussed.

I really enjoyed this conference, it is the best I've been to.

There should be a workshop dealing specifically with the issues of women in science careers.

In reference to question 12, either some of these talks are tomorrow or I did not attend because it did not jump out at me on the schedule. Perhaps these all should be highlighted on the schedule as sessions focused for students. The ones I did go to were very good. A systemic problem with the presentations is a failure to adhere to the time schedule. I suggest that a staff member be present at each presentation with the job of moderating length and questioning.

I've received no advising on minority opportunities, conferences, internships, or scholarships from my institution. Everything I've learned about any of the above has been through personal web searches.

For my freshman class, about four students are pursuing physics degrees. I feel that my university has really been good in that it offers full scholarships to minorities in mathematics and science. They encourage us to stay involved in our community and in summer internship programs.

Thank you once again for an excellent experience. See you next year. Keep up the good work. We are here to help one another.

More information on medical physics and its application to various fields.

The conference was an awesome life-changing experience. It was well organized and well-attended. The programs were also highly relevant to my needs. In particular I enjoyed the guaranteed 4.0 . Moreover, the hotel accommodations were especially comfortable, and the food surprisingly delightful. One recommendation I do have is: allow for at least one block of universal free time during the course of the conference which would allow attendees to explore the surrounding area, go sightseeing or watch a movie with their newly acquired friends. That way folks can enjoy themselves outside the formal context of the conference without feeling guilty, since there would be no sessions scheduled during that time.

I enjoyed the conference.

Great conference.

Thank you!

Keep NSBP alive!! More interactive session and have recruiters come and be ready to interview with interview sessions in conjunction with table meet and greet.

In all a perfect conference with only a few problems. How people get from the airport to the hotel and back may need to be looked into.

I wish I had this exposure earlier in my undergraduate career. This conference has changed the direction of my life providing support and access to so many opportunities! I hope that the NSBP will continue to hold joint conferences with NSHP. I will promote this conference to all minority students in physics. Thank you!

Keep up the good work. Don't stop fighting the good fight.

This year's conference was a lot better than last years. It was a little more relaxed and interesting. Good job!

I wish there were more opportunities for students to meet professors in a relaxed setting. It would be great if: 1. Professors fields of research were identified on their name tags. 2. We had email networks for people in the same region (e.g. californians). A national list would be great too. 3. Less focus was put on research at national labs and someone compiled a list of internships available everywhere, not just at NASA, DOE and DOD.

The food service though classy, was not suitable to the needs of the students.

Although the food provided was extremely healthy, it did not attract very many people.

The food was horrible. Waiters were rude.