#### Introduction

In March and April 2004, the National Institute on Aging (NIA) sponsored the Vital Visionaries Collaboration to encourage interaction between older people and first-year medical students, to foster improved understanding and appreciation of older people by medical students and to awaken older people to their creative possibilities. NIA worked in collaboration with the Johns Hopkins School of Medicine (JHM) and the American Visionary Art Museum (AVAM) in Baltimore, MD to develop this pilot project. The Academy for Educational Development (AED) handled project logistics, analyzed the student surveys, and wrote the draft report for the NIA.

NIA measured the medical students' attitudes towards aging and older people before and after four, two-hour art programs using the Aging Semantic Differential Scale and another attitude scale. The scale was administered to participating medical students and to an equal number of non-participating medical students. This report covers the analysis of findings.

## **Project Sample**

A total of 14 older individuals and 15 first year medical students volunteered for the project. The individuals 65 years and older were recruited through newspaper articles on the Vital Visionaries in the *Baltimore Sun* and the *Baltimore City Paper* in October 2003. In response to the articles, 30 older people from the Baltimore area volunteered to take part in the project. To ensure diversity, five minority participants were recruited from the NIA Baltimore Longitudinal Project on Aging. All volunteers were contacted by phone and mail to explain the program in greater detail and to determine dates and times that would be most convenient for their participation.

Student recruitment was accomplished with the help of Jean Ogborn, M.D., a faculty member from the Johns Hopkins University (JHU) School of Medicine who leads its *Physician and Society* (PAS) class. Ogborn facilitated participation of first-year medical students, administered most of the aging attitudes tests, and helped arrange students' transportation to AVAM. On January 28, 2004, Judith A. Salerno, M.D., M.S., NIA's Deputy Director, and Jeannine Mjoseth, NIA Public Affairs Specialist, made a presentation to the medical students about the Vital Visionaries, asked for volunteers to act as participants and controls, and distributed volunteer application forms. Participants and controls were selected using a random selection method: from the entire list of each group (community volunteers, student participants, and student controls), every fifth person was selected until 15 were chosen for each group. Each selected person was contacted; if an individual could not attend for any reason, the next person on the list was contacted.

**Intervention Design and Statistical Methods** 

All older individuals were recruited in late 2003 and first-year medical students were recruited in January and February 2004. The art intervention was implemented through four, two-hour sessions in March and April. With the exception of one senior participant who did not attend the last session, all community and student participants attended all four sessions.

An analysis was performed on participants' responses to 11 statements about their feelings with regards to their willingness, perceptions, and comfort level with working with older adults. Participants provided their responses on a five-point scale, ranging from "strongly agree" to "strongly disagree." Analysis was also performed on participants' responses to 32 items in the Aging Semantic Differential (ASD). The ASD items assess participants' attitudes towards older people. Each item is comprised of a bipolar adjective pair with seven response levels ranging in score from 1 to 7. Higher scores are reflective of more positive attitudes towards older people.

#### **Results**

## **Medical Student Participant Characteristics (Table 1)**

A total of 30 participants (15 control and 15 intervention group) provided baseline and follow-up information. Overall, there was an equal distribution of males and females, with slightly more males in the intervention than in the control group. A majority of the participants were single, with mean age of 23 years. Over one-half of the participants were white, non-Hispanic. A greater proportion of participants in the intervention group than the control group were Black and Native Indian.

Slightly more than 25% of the participants reported having visited a nursing home or assisted living facility more than 20 times and 80% reported having experience in working with older people. Very few participants reported having taken a course on adult development, aging, or older people. Participants in the control as well as intervention group reported fairly close relationships with older people as well as positive experience in working with older people. When reporting their relationship with older people, students were not asked to report the closeness of their relationship with their parents, but any older individual. Therefore, students may be reporting on their relationship with a grandparent, other relative, or a family friend.

# Response to statements about willingness, perceptions, and comfort level to work with older adults (<u>Table 2</u> and <u>Table 3</u>)

At baseline, participants in the intervention group had more favorable responses to most questions than those in the control group. Given the small sample size, statistical tests were performed only for change in scores; baseline and follow-up scores were not compared for those in the control and intervention group.

As seen in Table 2, compared with those in the control group, participants from the intervention group had significant favorable changes in scores for the six of the 11 statements. These were: "I would like to have a larger number of older patients in my future practice", "Older people make more interesting patients than do younger patients", Older people are difficult to talk to", "I have little in common with older people", "I feel comfortable around older people", and "I plan to obtain specialized training in geriatrics at some point in my medical education".

The mean change in individual item score was less than 0.5 point for all 11 items and for 3 of the 11 items for those in the control and intervention groups respectively.

As seen in Table 2, in response to the statement, "I would like to have a large number of older patients in my future practice," participants in the control and intervention group had mean scores of 2.8 and 3.0 respectively (representing neutral feelings). However, at follow-up, the mean scores for control and intervention groups were 2.9 and 3.8 respectively. Thus, intervention group participants demonstrated considerable willingness to focus on older patients in their future. Similarly, change in mean scores indicated that those in the intervention group were more likely to report favorable feelings on statements "Older people are difficult to talk to" and "I feel comfortable around older people." The negative change for these statements indicates disagreement with these statements.

A greater proportion of participants in the intervention group than the control group reported positive feelings at follow-up compared with baseline. For example, as seen in Table 3, about 13% of participants in the control and intervention group agreed with the statement "I would like to have a large number of older patients in my future practice." At follow-up, there was no change in the proportion of participants agreeing with this statement for those in the control group. However, almost 75% of those in the intervention group agreed with this statement. Similarly, at follow-up, 100% and 93% of participants in the intervention group disagreed with the statements "Older people are difficult to talk to" and "I have little in common with older people" respectively compared with about 50-60% of those in the control group. Interestingly, both at baseline and follow-up, 13.3% of participants agreed with the statement "I plan to obtain specialized training in geriatrics at some point in my medical education." For those in the intervention group, 10% and 20% of the participants agreed with this statement at baseline and follow-up respectively, representing a doubling in the percentage.

## Responses to ASD items (Table 4)

Overall, mean scores on individual ASD items shifted by less than 1 point for all 32 items among those in the control group compared to a shift of 1 or more point for 21 of the 32 items among those in the intervention group. Statistically significant and favorable change in mean scores was noted on 15 items between the control and intervention groups (Table 4). For example, a 1.7 and 0.3 point shift was seen in the mean scores for "independent ... dependent" and a 2-point and 0.5 point shift was seen the mean score for the item "secure ... insecure" for

those in the intervention and control group respectively. Interestingly, mean scores declined on five items for those in the control group and on one item for those in the intervention group. The negative shift item for the intervention group was the bipolar item "ordinary ... eccentric."

The score of all 32 items combined was comparable at baseline for the two groups. However, the mean score increased by 36.5 and 10.1 points for those in the intervention and control groups respectively. This difference between the two groups was significant at p<0.05.

## **Discussion**

The findings of this short-duration, small sample project indicate that when medical students are exposed to older people, their experience results in improved and positive attitudes towards the older people.

This short duration intervention included a total of 30 participants (100% participation rate with no attrition), 15 each in control and intervention group. Using the same instrument at baseline and follow-up, project participants reported on their feelings and impressions towards older people. A majority of the participants were young (age in the early 20s) and single. Mean age of oldest parent was slightly higher among participants in the intervention group (55.8+4.5) than in the control group (48.0+20.1), but the parental age distribution was wider for those in the control than in the intervention group. Very few participants had taken a course in adult development but a majority (80%) had experience in work involving older people. In addition, a considerable proportion of participants had visited a nursing home or assisted living facility more than once to up to 20 or more times.

The control group and intervention group participants were comparable with regards to their baseline responses on their feelings and responses to the ASD items. In some instances, the intervention group participants had more favorable feelings towards older people than those in the control group (e.g. higher mean scores for belief that they will be competent to work with older patients and for level of comfort around older people). Similarly, at baseline, those in the intervention group had slightly higher scores for some ASD items compared with those in the control group. Despite this difference, the magnitude of change on feelings as well as ASD items was greater for those in the intervention group than in the control group.

The limitations of this project and its implications include the following:

- 1. Small sample size: this limits the generalizability of the project findings.
- 2. Short-duration or timeframe of the intervention.
- 3. Follow-up time: In this project, project participants provided follow-up data shortly after the intervention was completed. It is unclear if these effects will persist over time.

- 4. Demographic characteristics of project participants: most project participants were young and single. It is unclear if these findings will hold with older, married participants. It is unclear if these findings can be applied to young adults in other fields of project.
- 5. Baseline feelings towards older people: In this project, the mean feelings and ASD item scores were neutral to positive for those in the control and intervention group, with slightly better scores for those in the intervention group. Those in the intervention group had slightly older parents than those in the control group. It is unclear if the program can contribute to improved attitudes of those who may have unfavorable attitudes at baseline. The small sample size limited our ability to examine this notion.

#### **Conclusions**

In conclusion, this short-duration, small sample project was effective in changing feelings of young adults towards older people. Future research is required with diverse ethnic and age group participants as well as other fields of project, to examine if there is a threshold at which the intervention will not change attitudes and if the positive changes persist over time.

**Table 1. Participant Characteristics (based on baseline data)** 

| Characteristic            | Control<br>N=15 | Intervention<br>N=15 | Total<br>N=30 |
|---------------------------|-----------------|----------------------|---------------|
| Sex                       |                 |                      |               |
| Male                      | 46.7            | 53.3                 | 50.0          |
| Female                    | 53.3            | 46.7                 | 50.0          |
| Race/ethnic status        |                 |                      |               |
| White, non-Hispanic       | 60.0            | 53.3                 | 56.7          |
| White, Hispanic           | 6.7             | 6.7                  | 6.7           |
| Asian                     | 26.7            | 13.3                 | 20.0          |
| Black or African-American | -               | 13.3                 | 10.0          |
| Indian/Native American    | 6.7             | 13.3                 | 10.0          |
|                           |                 |                      |               |

**Marital Status** 

| Married                                       | 6.7                | 13.3              | 10.0               |
|---|--------------------|-------------------|--------------------|
| Single  | 93.3               | 86.7              | 90.0               |
| Separated/Divorced                            | -                  | -                 | -                  |
| Widowed                                       | -                  | -                 | -                  |
| Frequency of visits to nursing home/assisted  | living facilit     | :y                |                    |
| None  | 13.3               | 6.7               | 10.0               |
| 1-4 times                                     | 33.3               | 20.0              | 26.7               |
| 5-9 times                                     | 13.3               | 13.3              | 13.3               |
| 10-14 times                                   | 6.7                | 33.3              | 20.0               |
| 15-19 times                                   | 6.7                | -                 | 3.3                |
| 20+ times                                     | 26.7               | 26.7              | 26.7               |
| Work or volunteering experience involving old | der people         |                   |                    |
| Yes   | 80.0               | 80.0              | 80.0               |
| Taken a course dealing with adult developme   | nt, aging, or      | older peop        | le                 |
| Yes   | 6.0                | -                 | 3.3                |
|   |                    | Mean+SD           |                    |
| Current Age                                   | 22.7 <u>+</u> 1.0  | 23.7 <u>+</u> 2.5 | 23.2 <u>+</u> 1.9  |
| Age of oldest living parent                   | 48.0 <u>+</u> 20.1 | 55.8 <u>+</u> 4.5 | 51.9 <u>+</u> 14.9 |
| Closeness of relationship with older person*  | 5.3 <u>+</u> 1.3   | 5.4 <u>+</u> 1.9  | 5.4 <u>+</u> 1.6   |
| Overall experience with older people*         | 5.7 <u>+</u> 1.0   | 6.3 <u>+</u> 0.8  | 6.0 <u>+</u> 0.9   |

<sup>\*</sup> Respondents used an eight-point scale ranging from 1-8, with higher scores indicative of close relationship and positive experience with older people.

Table 2. Mean (SD) Scores for Responses to Statements on Personal Feelings<sup>1</sup>

| Statements   | Control<br>(N=15) |                  |                     | Intervention<br>(N=15) |                  |                       |  |
|--|-------------------|------------------|---------------------|------------------------|------------------|-----------------------|--|
|  |                   |                  | Mean                | (SD)                   |                  |                       |  |
|  | Baseline          | Follow-<br>up    | Change <sup>2</sup> | Baseline               | Follow-<br>up    | Change                |  |
| I expect older patients to comprise a large part of my future practice                                 | 3.3 <u>+</u> 0.7  | 3.5 <u>+</u> 0.9 | 0.2 <u>+</u> 0.7    | 3.6 <u>+</u> 0.8       | 4.1 <u>+</u> 0.6 | 0.5 <u>+</u> 0.8      |  |
| I would like to have a large number of older patients in my future practice *                          | 2.8 <u>+</u> 0.6  | 2.9 <u>+</u> 0.5 | 0.1 <u>+</u> 1.0    | 3.0 <u>+</u> 0.7       | 3.8 <u>+</u> 0.5 | 0.9 <u>+</u> 0.7      |  |
| Older people are generally more difficult to work with than younger people                             | 3.0 <u>+</u> 1.0  | 2.6 <u>+</u> 0.8 | -0.3 <u>+</u> 1.0   | 2.6 <u>+</u> 0.7       | 2.0 <u>+</u> 0.5 | -<br>0.7 <u>+</u> 0.7 |  |
| I believe I will be competent in working with older patients   | 3.6 <u>+</u> 0.6  | 3.8 <u>+</u> 0.6 | 0.2 <u>+</u> 0.6    | 4.2 <u>+</u> 0.6       | 4.5 <u>+</u> 0.6 | 0.3 <u>+</u> 0.6      |  |
| I believe that working with older patients will be less exciting than working with younger patients    | 2.9 <u>+</u> 0.8  | 2.8 <u>+</u> 1.0 | -0.1 <u>+</u> 0.9   | 2.3 <u>+</u> 0.8       | 1.7 <u>+</u> 0.4 | -<br>0.6 <u>+</u> 0.8 |  |
| Older people make more interesting patients than do younger patients.                                  | 3.1 <u>+</u> 0.8  | 2.8 <u>+</u> 0.6 | -0.3 <u>+</u> 0.8   | 2.8 <u>+</u> 0.9       | 3.3 <u>+</u> 0.5 | 0.5 <u>+</u> 1.0      |  |
| I believe that I will understand the medical needs of older people better than those of younger people | 2.6 <u>+</u> 0.7  | 2.6 <u>+</u> 0.6 | 0.1 <u>+</u> 0.7    | 2.4 <u>+</u> 0.5       | 2.8 <u>+</u> 0.6 | 0.3 <u>+</u> 0.5      |  |
| Older people are difficult to talk to <sup>*</sup>   | 2.3 <u>+</u> 0.8  | 2.6 <u>+</u> 0.9 | 0.3 <u>+</u> 0.9    | 2.1 <u>+</u> 0.5       | 1.5 <u>+</u> 0.5 | -<br>0.6 <u>+</u> 0.5 |  |
| I have little in common with older people*   | 2.4 <u>+</u> 0.9  | 2.6 <u>+</u> 1.7 | 0.3 <u>+</u> 1.0    | 2.3 <u>+</u> 0.7       | 1.7 <u>+</u> 0.6 | -<br>0.6 <u>+</u> 0.7 |  |
| I feel comfortable around older people*  | 4.0 <u>+</u> 0.7  | 3.7 <u>+</u> 0.8 | -0.3 <u>+</u> 0.8   | 4.2 <u>+</u> 0.5       | 4.6 <u>+</u> 0.5 | 0.4 <u>+</u> 0.6      |  |

I plan to obtain specialized training in geriatrics at some point in my medical education.\*

2.5±0.9 2.5±0.9 -0.1±0.9 2.5±0.6 3.1±0.6 0.5±0.6

Table 3. Proportion of Respondents Agreeing, Neither Agreeing Nor Disagreeing, or Disagreeing with Statements on Personal Feelings<sup>3</sup>

| Statements  | Control            |        |                     |        | Intervention       |      |                     |      |      |       |      |      |
|---|--------------------|--------|---------------------|--------|--------------------|------|---------------------|------|------|-------|------|------|
|   | Baseline<br>(N=15) |        | Follow-up<br>(N=15) |        | Baseline<br>(N=15) |      | Follow-up<br>(N=15) |      |      |       |      |      |
|   | Pe                 | ercent | age of              | f resp | onden              | its  |                     |      |      |       |      |      |
|   | D                  | N      | Α                   | D      | N                  | Α    | D                   | N    | Α    | D     | N    | Α    |
| I expect older patients to comprise a large part of my future practice      | 13.3               | 40.0   | 46.7                | 13.3   | 33.3               | 53.3 | 6.7                 | 33.3 | 60.0 | -     | 13.3 | 86.7 |
| I would like to have a large number of older patients in my future practice | 26.7               | 60.0   | 13.3                | 20.0   | 66.7               | 13.3 | 20.0                | 66.7 | 13.3 | -     | 26.7 | 73.3 |
| Older people are generally more difficult to work with than younger people  | 40.0               | 26.7   | 33.3                | 53.3   | 26.7               | 20.0 | 46.7                | 40.0 | 13.3 | 86.7  | 13.3 | -    |
| I believe I will be competent in working with older patients                | 6.7                | 20.0   | 73.3                | -      | 26.7               | 73.3 | -                   | 6.7  | 93.3 | -     | 6.7  | 93.3 |
| I believe that working with older patients will be less exciting than       | 40.0               | 26.7   | 33.3                | 46.7   | 26.7               | 26.7 | 60.0                | 33.3 | 6.7  | 100.0 | -    | -    |

<sup>&</sup>lt;sup>1</sup>Information was collected on a 5-point scale, with the following options: 1=strongly disagree, 2=disagree, 3=neither agree nor disagree, 4=agree, 5=strongly agree

<sup>&</sup>lt;sup>2</sup>Change in score is computed as follow-up score -baseline score.

<sup>\*</sup>Significant difference between control and intervention in change of score at baseline and follow-up at p<0.05.

| working w | ith y | ounger | patients |
|-----------|-------|--------|----------|
|-----------|-------|--------|----------|

| Older people make more interesting patients than do younger patients  | 26.7 | 33.3 | 40.0 | 33.3 | 53.3 | 13.3 | 14.3 | 64.3 | 21.4 | -     | 66.7 | 33.3  |
|---|------|------|------|------|------|------|------|------|------|-------|------|-------|
| I believe that I will understand the<br>medical needs of older people<br>better than those of younger<br>people | 53.3 | 33.3 | 13.3 | 40.0 | 53.3 | 6.7  | 53.3 | 46.7 | -    | 26.7  | 66.7 | 6.7   |
| Older people are difficult to talk to   | 66.7 | 20.0 | 13.3 | 55.3 | 20.0 | 26.7 | 80.0 | 20.0 | -    | 100.0 | -    | -     |
| I have little in common with older people   | 66.7 | 13.3 | 20.0 | 60.0 | -    | 40.0 | 66.7 | 26.7 | 6.7  | 93.3  | 6.7  | -     |
| I feel comfortable around older people  | -    | 26.7 | 73.3 | 13.3 | 13.3 | 73.3 | -    | 6.7  | 93.3 | -     | -    | 100.0 |
| I plan to obtain specialized training in geriatrics at some point in my medical education                       | 46.7 | 40.0 | 13.3 | 53.3 | 33.3 | 13.3 | 53.3 | 40.0 | 10.0 | 13.3  | 66.7 | 20.0  |

<sup>&</sup>lt;sup>3</sup>Information was collected on a 5-point scale, with the following options: 1=strongly disagree, 2=disagree, 3=neither agree nor disagree, 4=agree, 5=strongly agree.

Table 4. Mean (SD) Scores on Feelings or Impressions about Older People<sup>4</sup>

| ASD Items                 |                  | Control<br>(N=15) |                  | Intervention<br>(N=15) |                  |                  |  |
|---------------------------|------------------|-------------------|------------------|------------------------|------------------|------------------|--|
|                           | Mean (SD)        |                   |                  |                        |                  |                  |  |
|                           | Baseline         | Follow-up         | Change           | Baseline               | Follow-up        | Change           |  |
| Progressive Old fashioned | 2.6 <u>+</u> 0.7 | 2.9 <u>+</u> 0.7  | 0.3 <u>+</u> 0.9 | 3.0 <u>+</u> 0.8       | 4.2 <u>+</u> 1.1 | 1.3 <u>+</u> 1.3 |  |

| Consistent Inconsistent          | 4.6 <u>+</u> 1.2 | 4.8 <u>+</u> 0.7 | 0.3 <u>+</u> 0.9  | 5.0 <u>+</u> 1.9 | 5.5 <u>+</u> 0.8 | 0.5 <u>+</u> 1.4 |
|----------------------------------|------------------|------------------|-------------------|------------------|------------------|------------------|
| Independent Dependent*           | 3.4 <u>+</u> 1.5 | 3.7 <u>+</u> 1.0 | 0.3 <u>+</u> 1.1  | 3.6 <u>+</u> 1.2 | 5.3 <u>+</u> 1.1 | 1.7 <u>+</u> 1.5 |
| Rich Poor                        | 3.9 <u>+</u> 0.8 | 3.8 <u>+</u> 0.7 | -0.1 <u>+</u> 0.8 | 3.7 <u>+</u> 0.9 | 3.8 <u>+</u> 0.7 | 0.1 <u>+</u> 0.9 |
| Generous Selfish                 | 4.9 <u>+</u> 0.8 | 5.2 <u>+</u> 0.7 | 0.3 <u>+</u> 1.1  | 4.4 <u>+</u> 0.7 | 5.7 <u>+</u> 0.4 | 1.3 <u>+</u> 0.9 |
| Productive Unproductive*         | 4.2 <u>+</u> 0.9 | 4.2 <u>+</u> 0.9 | 0.1 <u>+</u> 1.2  | 3.8 <u>+</u> 0.9 | 5.2 <u>+</u> 1.0 | 1.5 <u>+</u> 1.2 |
| Busy Idle                        | 3.8 <u>+</u> 1.0 | 4.3 <u>+</u> 0.9 | 0.5 <u>+</u> 1.1  | 3.6 <u>+</u> 0.8 | 4.9 <u>+</u> 1.4 | 1.3 <u>+</u> 1.2 |
| Secure Insecure <sup>*</sup>     | 4.1 <u>+</u> 0.9 | 4.6 <u>+</u> 1.1 | 0.5 <u>+</u> 1.2  | 3.7 <u>+</u> 0.8 | 5.7 <u>+</u> 0.7 | 2.0 <u>+</u> 1.0 |
| Strong Weak <sup>*</sup>         | 3.6 <u>+</u> 0.9 | 3.2 <u>+</u> 0.8 | -0.4 <u>+</u> 1.0 | 3.5 <u>+</u> 0.9 | 5.2 <u>+</u> 1.4 | 1.7 <u>+</u> 1.2 |
| Healthy Unhealthy *              | 3.2 <u>+</u> 0.7 | 3.1 <u>+</u> 0.9 | -0.1 <u>+</u> 0.7 | 3.2 <u>+</u> 0.7 | 4.6 <u>+</u> 1.1 | 1.4 <u>+</u> 0.7 |
| ActivePasssive                   | 3.5 <u>+</u> 0.9 | 4.2 <u>+</u> 0.7 | 0.7 <u>+</u> 0.7  | 3.4 <u>+</u> 0.9 | 5.0 <u>+</u> 0.9 | 1.6 <u>+</u> 1.0 |
| HandsomeUgly                     | 3.7 <u>+</u> 0.7 | 3.9 <u>+</u> 0.7 | 0.2 <u>+</u> 0.8  | 3.7 <u>+</u> 0.7 | 4.6 <u>+</u> 1.5 | 0.7 <u>+</u> 1.8 |
| Cooperative Uncooperative*       | 3.9 <u>+</u> 0.7 | 4.3 <u>+</u> 0.9 | 0.4 <u>+</u> 1.1  | 3.9 <u>+</u> 0.7 | 5.5 <u>+</u> 0.7 | 1.6 <u>+</u> 0.8 |
| Optimistic Pessimistic*          | 4.4 <u>+</u> 1.1 | 4.3 <u>+</u> 0.9 | -0.1 <u>+</u> 0.9 | 4.4 <u>+</u> 1.1 | 5.3 <u>+</u> 0.7 | 1.6 <u>+</u> 0.8 |
| Satisfied Dissatisfied*          | 4.4 <u>+</u> 0.8 | 4.7 <u>+</u> 0.7 | 0.3 <u>+</u> 0.8  | 4.4 <u>+</u> 0.8 | 5.4 <u>+</u> 0.5 | 1.5 <u>+</u> 0.8 |
| Expectant Resigned <sup>*</sup>  | 3.7 <u>+</u> 0.7 | 4.0 <u>+</u> 0.7 | 0.3 <u>+</u> 0.7  | 4.0 <u>+</u> 0.5 | 4.3 <u>+</u> 1.6 | 0.3 <u>+</u> 1.8 |
| Flexibile Inflexible             | 3.0 <u>+</u> 1.3 | 3.3 <u>+</u> 1.0 | 0.3 <u>+</u> 1.6  | 3.2 <u>+</u> 0.5 | 4.2 <u>+</u> 1.2 | 1.1 <u>+</u> 1.3 |
| Hopeful Dejected <sup>*</sup>    | 3.9 <u>+</u> 1.3 | 4.2 <u>+</u> 1.0 | 0.3 <u>+</u> 1.6  | 4.0 <u>+</u> 0.7 | 5.2 <u>+</u> 0.7 | 1.3 <u>+</u> 0.9 |
| Organized Disorganized*          | 4.5 <u>+</u> 1.5 | 4.9 <u>+</u> 0.7 | 0.4 <u>+</u> 1.6  | 4.1 <u>+</u> 1.2 | 5.7 <u>+</u> 0.8 | 1.6 <u>+</u> 1.1 |
| Happy Sad <sup>≛</sup>           | 4.0 <u>+</u> 1.4 | 4.4 <u>+</u> 0.6 | 0.4 <u>+</u> 1.6  | 4.2 <u>+</u> 0.6 | 5.7 <u>+</u> 0.8 | 1.5 <u>+</u> 1.0 |
| Friendly Unfriendly <sup>*</sup> | 4.8 <u>+</u> 1.5 | 5.3 <u>+</u> 0.6 | 0.5 <u>+</u> 1.3  | 4.8 <u>+</u> 1.0 | 6.2 <u>+</u> 0.6 | 1.3 <u>+</u> 0.9 |

| Neat Untidy                      | 4.2 <u>+</u> 1.3    | 4.6 <u>+</u> 0.8    | 0.4 <u>+</u> 1.5   | 4.4 <u>+</u> 1.1    | 5.2 <u>+</u> 0.8    | 0.8 <u>+</u> 1.0   |
|----------------------------------|---------------------|---------------------|--------------------|---------------------|---------------------|--------------------|
| Trustful Suspicious <sup>*</sup> | 4.4 <u>+</u> 1.7    | 4.5 <u>+</u> 0.8    | 0.1 <u>+</u> 1.7   | 4.7 <u>+</u> 0.8    | 5.2 <u>+</u> 1.0    | 0.5 <u>+</u> 1.5   |
| Self-reliant Dependent           | 3.2 <u>+</u> 1.2    | 3.8 <u>+</u> 1.0    | 0.6 <u>+</u> 1.3   | 3.7 <u>+</u> 0.7    | 5.2 <u>+</u> 1.1    | 1.5 <u>+</u> 1.1   |
| Liberal Conservative             | 2.4 <u>+</u> 1.2    | 2.7 <u>+</u> 0.7    | 0.3 <u>+</u> 1.3   | 2.9 <u>+</u> 0.8    | 4.0 <u>+</u> 1.2    | 1.1 <u>+</u> 1.1   |
| Certain Uncertain                | 4.0 <u>+</u> 1.3    | 4.6 <u>+</u> 0.8    | 0.6 <u>+</u> 1.3   | 4.1 <u>+</u> 0.8    | 5.1 <u>+</u> 1.0    | 1.0 <u>+</u> 1.1   |
| Tolerant Intolerant              | 3.4 <u>+</u> 1.2    | 3.6 <u>+</u> 1.1    | 0.2 <u>+</u> 1.1   | 3.8 <u>+</u> 1.2    | 4.8 <u>+</u> 1.2    | 0.9 <u>+</u> 1.9   |
| Pleasant Unpleasant <sup>*</sup> | 4.5 <u>+</u> 1.4    | 5.4 <u>+</u> 0.8    | 0.9 <u>+</u> 1.1   | 4.7 <u>+</u> 1.0    | 6.0 <u>+</u> 0.6    | 1.3 <u>+</u> 1.0   |
| Ordinary Eccentric <sup>*</sup>  | 3.7 <u>+</u> 1.5    | 3.6 <u>+</u> 1.1    | -0.1 <u>+</u> 1.3  | 4.0 <u>+</u> 1.0    | 3.4 <u>+</u> 1.2    | -0.7 <u>+</u> 1.8  |
| Aggressive Defensive             | 3.2 <u>+</u> 1.1    | 3.8 <u>+</u> 0.6    | 0.6 <u>+</u> 1.1   | 3.5 <u>+</u> 0.6    | 4.0 <u>+</u> 0.7    | 0.5 <u>+</u> 1.0   |
| Exciting Dull                    | 3.3 <u>+</u> 1.6    | 4.2 <u>+</u> 1.2    | 0.9 <u>+</u> 1.4   | 3.6 <u>+</u> 0.8    | 5.4 <u>+</u> 0.9    | 1.7 <u>+</u> 0.9   |
| Decisive Indecisive              | 4.2 <u>+</u> 1.3    | 4.8 <u>+</u> 1.0    | 0.5 <u>+</u> 1.3   | 4.0 <u>+</u> 1.0    | 5.2 <u>+</u> 0.9    | 1.1 <u>+</u> 1.0   |
| All 32 items combined*           | 123.7 <u>+</u> 18.6 | 133.3 <u>+</u> 11.5 | 10.1 <u>+</u> 19.6 | 125.2 <u>+</u> 14.4 | 161.8 <u>+</u> 18.3 | 36.5 <u>+</u> 18.1 |

<sup>&</sup>lt;sup>4</sup>Information was collected on a seven point scale with 1 being negative feelings and impressions and 7 being positive feelings and impressions about older people.

## **Overview of Sessions**

## **Detailed Session Descriptions**

## Session 1: March 2, 2004, 2-4 pm

Rebecca Hoffberger, founder and director of the American Visionary Art Museum, welcomed 14 senior community participants and 15 students from Johns Hopkins School of Medicine to the first session of the program and commended the Museum's partnership with the program's sponsor, the National Institute on Aging. She described

<sup>\*</sup>Significant difference between control and intervention in change of score at baseline and follow-up at p<0.05.

this year's exhibit, the Golden Blessings of Old Age, as a "love song to the unique voice of what it is to grow older" and "the obligation that the older generation has to impart the enjoyment and creativity of older age to our children so that they will look forward to growing older."

Theresa Segreti, AVAM Director of Design and Education, oversaw a warm-up exercise in which each student teamed with an older participant got to know each other by pretending they were going to be stranded on a desert island and needed to plan how they would manage. They asked each other ten questions to find out about one another.

You are going to be stranded on a desert island:

- 1. What music will you take with you?
- 2. What book will you take with you?
- 3. What food will you take with you?
- 4. What clothing will you take with you?
- 5. Who else will be there with you?
- 6. What special item will you take?
- 7. What kind of shelter will you have?
- 8. What else is on the Island?
- 9. What five every-day objects will you take?
- 10. How will you be rescued?

The discussions produced lively conversations. Participants reported on their findings about one another, at times uncovering remarkable coincidences in preferences for books, and music—one pair discovered they both lived in the same apartment building and another pair discovered that they both played the trumpet. At the end of the exercise a number of participants commented that they were so lucky to have found their particular partners.

Following the warm-up exercise, journalist Don Lambert led a presentation on Elizabeth Layton, visionary artist and his good friend. Layton, who had overcome a number of trials in her life, began taking her first art classes in "blind contour drawing" at age 68 to combat depression. Blind contour drawing involves creating art without looking at the paper on which one is drawing. She began drawing self-portraits while looking in a mirror. Soon she was drawing 12 hours each day, and at the end of six months, her depression had lifted. Mr. Lambert gave a slide presentation of many of Layton's works and described the life events embedded within her art work of self portraits. He then took the class on a short tour of the museum's exhibit of her work.

Lambert closed the session by reminding participants of Ms. Layton's principals: "Although we're bombarded with

messages about looking young, it's OK to be old; it's OK to look old and to show that in your work."

#### Session 2: March 9, 2004, 2-4pm

Rebecca Hoffberger welcomed participants to the second session of the program. The museum is dedicated to intuitive, untrained, and self-taught artistry. She described the artists and works of the museum, including a whirly-gig by Vollis Simpson, 85, in the museum's plaza. It is made of discarded items such as old street signs and car air filters. The piece is built to move with the wind in every direction and to reflect lights at night. Hoffberger also pointed to the matchstick creations of artist Wayne Kursy. She then led participants on a guided tour of the museum, pointing especially to the works of John Roots Hopkins, 79, the featured speaker for the afternoon. In addition, she devoted much time explaining a major exhibition of a series of tapestries by Esther Krinitz. The tapestries illustrate Ms. Krinitz's life growing up in a Jewish family in Poland; living through the Holocaust; and finally, coming to this country, marrying, and raising her family. The tapestries are meant as a gift to her children and grandchildren.

Following the tour, Hopkins made a presentation about his painting. Although he started just a few years ago, he has produced more than 1,000 works of art. He described how happy he has become because he has found an outlet for his creativity despite a long list of physical problems. His secret to his happiness at this late stage in life: "Find an activity you really love, and dedicate yourself to it."

Because the tour and Hopkins' presentation ran longer than anticipated, the planned art project for the day was postponed until the next session on March 30.

## Session 3: March 30, 2004, 2-4pm

Theresa Segreti opened the session by inviting community participants to take part in a "show and tell" session of their own works of art:

- William Sneeringer showed a poster he had made following a bicycle tour through Cuba. He was impressed by the fact that children in Cuba appear to be more active, healthy, and lean than children in the United States; he also noticed that Cubans seemed to drive more safely than people in this country, making the streets safe for pedestrians and children who play on or near them. Following his tour, he organized a donation drive that enabled him to send baseball equipment to Cuban children. "My passion is finding ways to make the United States more interested and involved in keeping children safe and healthy."
- Minnie Kaufman showed a collage she had made from nylon netting, cut-out materials, and paint. The collage,

entitled "Partners for Life," reflected her thoughts about participating in the Vital Visionaries program. It featured symbols of medicine and health to capture the spirit of the program's collaboration of older participants and medical students.

- Oliver Jackson showed a book he had assembled, "Memories for my Family," which is a compilation of poetry his 87-year-old mother had written to her sons and daughters over time. The recipient of each poem is known by the poem's contents. The book is meant as a memento about his mother for not only the recipients of the poems, but also for the grandchildren and great-grandchildren so that they might know and remember his mother through the years.
- Sol Goodman read "Trilogy," a group of three poems he had written in tribute to the Vital Visionaries program:

#### **TRILOGY**

Tenses You are What we were When we were What you are.

## **Hypochondria**

When you are apprised of my aches and pains A hypochondriac you will say If he's so sick, I wonder how He managed to grow so old and gray. However with all your medical skills Young doctor, you cannot relieve me But when I am entombed in my silent grave Then perhaps you will believe me!

# **Immortality**

I'm not the man I used to be (But then again, I never was) I want the future to wait on me But then again it never does.

I would like posterity to mark my name But I am afraid it never will Yet, I have had a love to claim And that will last until!

• Elaine Rosenbloom revealed that she creates somewhat bawdy poetry, then recited a short poem.

Introduction: I was reading an article about Subliminal Seduction (the momentary flashing of a message on the TV screen--invisible to the eye, but read by the brain) influencing the viewer to buy the sponsor's product. And after thinking about it I wrote:

#### Subliminal Seduction

Subliminal seduction is the way to go today. Technology has reached new heights-"Big Brother's" here to stay!
These developments are marvelous-But how can they compare
To seduction the old-fashioned way:
In black lace underwear!

After much laughter and a great round of applause, Segreti invited others who wished to do so to bring additional creations to the next week's closing session.

Segreti then introduced the day's activities, centering on the concept of super heroes. Participants used an existing sheet of questions to capture their partners' concepts of themselves as a superhuman and then reported to the larger group their partners' answers. The questions were:

- 1. If you were given a super-human power, what would you want it to be?
- 2. How would you use your power? That is, what would be your superhuman mission?
- 3. You can have one magical tool or instrument that also helps you in your super-human pursuits. What would it be? And what would it do?
- 4. What would be your weak spot or area of vulnerability?
- 5. What super-heroic name would you give yourself?

Teammates provided answers to these questions, and then were directed to build the super hero creation of their partner based on the partner's response. They used materials of cardboard, glue, colored paper and foil, and other odds and ends provided by the museum staff to create super heroes for their partners. Participants then explained how they had created the figures, and what the various elements of their creations were meant to convey about their partner.

Several of the medical students and participants noted as they were leaving that they had no idea how much fun this would be and were surprised by the level of creativity and interest each participant showed.

## Session 4: April 6, 2004, 2-4 p.m.

At the beginning of this session, medical student participants again took the Aging Semantic Differential survey to provide NIA with post-program data about their attitudes related to older people. Segreti then invited all participants to share any additional creative projects they wished to show to the group.

- Community participant **Gail Brooks** brought in a gift for museum staff that demonstrated her impression of the program. It was a floral arrangement made with a Harry Lauder Walking Stick (like some of us, it's gnarled but there's still plenty of life in it), daisies, and Acuba leaves. Together they signified these thoughts: being bound together, shared expression, aging with signs of new life, and forever-lasting friendships.
- Community participant **Bill Sneeringer** brought a colorful stained glass creation for his partner Ben. Because they are both very religious, it incorporated a sacred heart of Jesus and engravings from Dante's *Inferno*. Because Ben hopes to become a cancer specialist, it also represented that humanity and God form a path to both a cure for cancer and peacefulness in death.
- Community participant **Maggie Kramer** wore her "diaper hat," a humorous creation resembling a chicken, which brought a lot of laughs from the group.
- Community participant **Paul Mintz** brought in a series of colorful paintings that he had created from live models.
- Students **Paulette Grey** and **Jennifer Warner** received hearty applause for their performance of a song they had written in tribute to their partner, **Lloyd Alston**. The tune, "Let's Hear It for Lloyd," was a takeoff of the 1980s hit song, "Let's Hear it for the Boy" from the Footloose soundtrack.

New and improved title: "Let's Hear It for Lloyd"

The partner we share is Lloyd I wish he was all mine Oh we love him love him love him We always have a real good time

And now that the program's done So sad to say goodbye, yeah yeah Cause what he does he does so well Makes us wanna yell...

Let's hear it for Lloyd Let's give Lloyd a hand. Oh Vital Visionaries Is how we met this special man. Oh, we're so glad that he's the one We've been having so much fun Oh, whoa whoa whoa... let's hear it for Lloyd!

Hoffberger asked participants to describe what surprised and delighted them about the program. Examples of responses follow:

**Sol Goodman** asked for a new way of thinking about older people, as more and more are living longer, productive lives. He read two news articles, including one from Ellen Goodman entitled "Waking Up to the New Realities of Aging," and another from a psychiatrists' web site about the difficulties of caring for older patients due to barriers in today's health care system.

**Sister Mary Alice Chineworth** mentioned that she is nearing her 87th birthday and is still very active, co-chairing a large event. Despite age and responsibility, she expressed delight in having been chosen for the program. She complimented her partner **Shannon Shea** for making participation in the program so worthwhile. **Sister Mary Brenda Motte** confirmed and complimented Sister Mary Alice for her vigor and enthusiasm. And **Shannon Shea** confirmed how much she and **Sister Mary Alice** share in common.

Student **Marc Callender** said that the program delighted him because it gave him the knowledge that he has so much to look forward to in his own later years, adding that he hoped he would be "just like all you guys" in the

group when he got older.

Student **Jessica Long** said, "I feel so blessed to have taken part. My partner Beatrice and I got along amazingly well, and could easily talk with one another." She showed a mirror that her partner, **Beatrice Nordberg** had given her as a gift. It signified her self-reflection as one of her superhuman's power that Beatrice had created for Jessica the previous week.

**Beatrice Nordberg** said, "I have been surprised by the warmth and intelligence of the group members, and by the medical students' easy nature. "She added that "Meeting my partner, Jessica, was the most pleasant and delightful surprise of all—we expect to stay friends forever."

**Minnie Kaufman** stated that her partner, **Hannah Alphs**, will be an excellent physician. "She has the great ability to listen... I talk to her nonstop...and is so warm." She added, "I always felt like an outsider, but here I can display how I really am, and I feel I have many equals." Earlier, Kaufman had emailed this note to a member of the staff:

"I wish to donate my \$100.00 to the American Visionary Arts Museum. This program has validated my feelings that I am not a square peg in a round hole. It has given me inspiration, exhilaration and a feeling of belonging to a group of very special people who have been blessed with talent that they are proud to exhibit. One more tidbit I AM WAITING TO BE DISCOVERED. Thank you again."

Community participant **Lloyd Alston:** "I thought I was stoic and staid, but these young ladies have endowed me with their good spirit. I was blessed to work with Paulette and Jennifer—their song, the flavor of their personality, their love and experience—I have loved this association and wouldn't have missed this for the world.

Student **Nicholas Donoghoe** spoke of his early disappointment when he thought he had not been selected for the program, his delight in finally being selected, and how his relationship with his grandmother as he grew up gave him a special affection and appreciation for older people. He then explained that his partner, **Maggie Kramer**, was "perfect for me" and was the highlight of his participation. He added that Maggie, who had once owned an Irish pub, joined him and some other medical students for an Irish pub evening on St. Patrick's Day, which fell in the middle weeks of this program. "It doesn't matter about your age. It's the person you are...[His partner] Maggie was the life of the party and I was lucky to get to know her."

Segreti then asked all participants to complete an art project by making a framed collage to demonstrate their Vital Visionaries experience. They completed these projects encompassing the super heroes they created the previous week, their blind contour drawings, and other materials provided for them. In closing, Segreti invited pairs to have

their pictures taken in the museum's photo booth, and then to join each other at a closing reception.