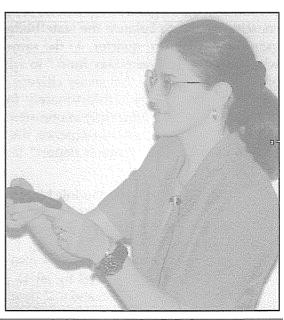
# Chapter Six

# Moving Allegiances: Shifting Boundaries in Virginia, 1990–2001

By the early nineties, the Virginia Academy of Science began the difficult task of assessing its current role within the transformed scientific community of the state. Aware of the vast changes to the scientific and political landscape of Virginia over the previous twenty-five years, the VAS sought to alter publicly its focus without compromising its original mission: to encourage and promote scientific vitality within the Commonwealth. By shifting direction to best serve its membership, the Academy hoped to position itself to mobilize personal and institutional resources both to support its work within the larger political context and to compete effectively for resources and standing.

Charlotte Webb presented the 75th Anniversary Lecture, "Major Accomplishments of the Virginia Academy of Science" at the 1997 annual meeting of the Academy. At this celebration, Webb summarized key events in the Academy's history that are now gathered in this volume, A History of the Virginia Academy of Science, 1923–2001.



Setting the Stage: 1990–2001

In 1989 when Virginians elected Democrat Lawrence Douglas Wilder as the first African-American governor of the Commonwealth, there were few indications of the fiscal crisis that would characterize his four years in office. As is the practice in Virginia with its biennial budget process, Wilder went into office with a budget laid out by his predecessor, Gerald Baliles. And, given the fiscal responsibility of Governor Baliles, it is understandable that Wilder might have thought that his gubernatorial tenure would be a relatively easy one regarding budgetary issues. Such was not the case, however, as Virginia suffered an economic crisis of a magnitude not seen since the period of the Great Depression. The downsizing of the federal government in the area of defense resulted in an entirely unforeseen decline in state revenues.1 Newport News Shipbuilding and Drydock, Virginia's largest private employer and a company whose livelihood depended in large part on defense contracts, found itself with its back against the wall as Washington canceled, cut, and delayed contracts for large war-time vessels. The economic climate was little better in the rest of the business community, as the ripple effect caused by the federal action spread, with particular impact on the communities around Hampton Roads and Northern Virginia.

Not surprisingly, the unforeseen economic crisis caused sharp shortfalls in the Virginia budget. Since the General Assembly is required constitutionally to balance the state budget, Wilder's first budget required cuts in every quarter. At the same time, the governor created what he termed a "rainy day fund," to which he dedicated money out of the normal budget that many citizens felt would be better so allocated on a sunny day. Unfortunately for colleges and universities, Wilder chose higher education as one area where budget cuts were particularly draconian. As a consequence, the 1991 State Council of Higher Education (SCHEV) "Virginia Report" lamented that the first year of the 1990s was:

...unlike any other in Virginia higher education since World War II. The public colleges and universities have experienced budget reductions that can only be called extraordinary and debilitating. They first received a 2 percent reduction in their 1989-1990 general fund support. This has been followed by an 11 percent general fund reduction for 1990-91, and a 17 percent reduction for 1991-

92. Further, the Governor has been given the authority to implement additional general fund reductions that could extend the 17 percent loss to 22 percent. These reductions have occurred over a period when enrollment has grown by 8 percent, and inflation has lessened the value of the dollars that remain.<sup>3</sup>

Money problems alone, however, were not the end of Wilder's difficulties. Indeed, his term was marred further by scandals that might have been overlooked in other times, but given the fiscal shortfalls, were grist to the Republican mill.

It is not surprising, given this environment, that when the Democratic nominee Mary Sue Terry, the two-term Attorney General, ran against George Allen — a strongly right-wing candidate — she found herself in an uphill battle. Although political scientists originally pegged her as the favorite in this race, she lost ground rapidly during the campaign, many — although not all — her problems resulting from the timing of her candidacy. George Allen, son of the former coach of the Redskins football team, followed Douglas Wilder into the Governor's office.

The only non-Virginian to be elected to the office of Governor in the history of the Commonwealth, Allen's identity as a football player for the University of Virginia evidently was thought by the electorate to have provided him with the seemingly necessary defensive and offensive skills to play the game of politics. It is apparent, however, that even without the unfortunate legacy of the Wilder years, Virginians were moving more to the right. Increasingly:

[O]n the great national political issues . . . there was a clearly identifiable Virginian position, as reflected in the ballots cast in federal election contests and the votes of the state's delegation in Congress. Virginians in the second half of the twentieth century [had] resolutely resisted calls for retreat and unilateral disarmament in the face of communist expansion. They championed free-market economic policies and conservative fiscal approaches conducive to economic growth and opportunity. And they labored to stem the erosion of state and local prerogatives through the accretion of power by the federal bureaucracy and courts.<sup>4</sup>

For all these reasons, then, George Allen was a more attractive candidate than any Democrat, and given Virginians' negative experience during the term of the first African-American governor, the election of a woman Democrat was simply not in the cards.

Like Wilder, George Allen appeared determined to carve out a reputation for himself that would transcend state boundaries. A roll-back of environmental regulations that interfered with business, and cutbacks in spending — including not only social programs but also staffing of state agencies, were immediate steps on his agenda. Additionally, George Allen proved to be no better a friend to higher education than Wilder. Cutbacks in spending to universities and colleges, the institution of new controls over elementary and secondary education, a refusal to take federal dollars through Goals 2000 that were meant only to bring new technologies into school houses — all of these steps toward downsizing were balanced by a vigorous attempt to lure businesses into the Old Dominion to buttress the economy. "Virginia is open for business" became the governor's slogan. It was predictable that Governor Allen's new program would not sit well with all Virginians, and that, in turn, impacted the relationship between the General Assembly and the Commonwealth's highest office.

Battles with the General Assembly were conducted with, for Virginia, an unprecedented level of incivility. While the House of Delegates remained in the control of the Democrats, the Senate was evenly divided; the only safeguard the Democrats had for some of their most cherished programs was the presence of Democratic Lieutenant Governor Don Beyer, who was empowered to cast tie-breaking votes in the Senate. At the same time, a group of largely Republican businessmen led by (John) "Till" Hazel of Northern Virginia, an attorney and a developer, had taken up the cause of higher education. By the time Governor Allen was able to introduce his own budget in the Long Session of 1996, a variety of alliances kept some of the cuts Allen had proposed within more reasonable limits. Alliances notwithstanding, higher education in the first half of the 1990s reeled from Allen's program; in particular one decree — that no more than two individuals from any given institution could have state support to attend the same meeting without formal approval — having had a direct effect on the Virginia Academy of Science.

In 1997, Jim Gilmore defeated Don Beyer and became the second Republican governor in the decade, in no small part because of his ap-

pealing promise to Virginians that he would repeal the car tax. With his wife a strong teaching presence at Randolph-Macon and himself a graduate of the University of Virginia, Gilmore certainly is no stranger to education in Virginia. And, on June 30, 1998, he demonstrated his commitment to higher education by establishing the Blue Ribbon Commission on Higher Education. Primarily focused on raising tuition, in Governor Gilmore's words, "to make higher quality and affordable cost goals throughout its entire system of higher education," and "making our college boards true governing bodies" so that they may fulfill their duties to the citizenry, the Commission was also able to assess the overall economic needs of the region and consider the various ways in which the universities and colleges might turn out graduates to participate in the ever-expanding industrial landscape of the Commonwealth.<sup>5</sup>

# Sections, Committees, and Related Events Membership

As was the case in the previous decade, of great concern to Council was a decline in overall membership (Table 6.1). From 1985 to 1990, regular membership continued to decline. Athough overall membership was essentially constant, the loss of 180 regular members was offset, in part, by an increase of 93 student memberships. This change is typical for memberships of southern academies of science that fluctuate by about ten percent from one year to the next. Given the nearly twenty percent plunge in members from 1980 to 1985, the Academy appeared to be fighting back. Council's concern, however, focused primarily on the losses of *Regular* members. As Elsa Falls of Randolph-Macon College remarked: "The problem here is a problem with the

Table 6.1. VAS Membership

	1980	1985	1990	1995	2000	
Regular	1165	914	734	713	527	
Contributing	95	63	58	55	63	
Sustaining	58	30	28	26	15	
Student	138	171	264	307	245	
Life	19	24	29	35	30	
Business	19	13	13	17	17	
Totals	1494	1217	1126	1053	897	

core membership — of maintaining a critical mass. In order to be a viable organization, we need to have representatives from a broad variety of institutions, as well as keep a core group of committed regular members." To address this problem, in November 1990, President Richard Brandt appointed Hugo Seibel of the Anatomy Department of Virginia Commonwealth University and the Medical College of Virginia as the new chair of the Membership Committee.

Once in his new position, Seibel adopted a three-pronged strategy to attract new members. First, he sent out letters to all pre-med advisors at Virginia Commonwealth University, encouraging them to promote the Virginia Academy of Science within their student population. Next, Seibel issued an informational letter outlining the mission of the VAS to every chair of a science department in Virginia's colleges and universities. Finally, he mailed a circular to the 1100 Academy members, lobbying for each person to recruit new members "intensely". Given his enormous attention to detail and his positive attitude exemplified in the "Minutes," Seibel obviously felt his plan would be sufficient to shore-up the membership numbers.<sup>8</sup>

Yet, by March 1991, Seibel had not received responses from any pre-med advisors or department heads, prompting a lengthy further discussion within Council over the state of VAS membership. Quite pragmatically, Carolyn Conway commented that, in her opinion, the Virginia Academy of Science was not viewed as very important by some deans and departmental members. Following that line of logic, Michael Bass pointed out that in the serious economic downturn, travel funds had become more limited than ever. Since persons who attended or presented papers at the annual meeting of the Academy were not always rewarded by their superiors, it would stand to reason that few chairs would choose to spend scarce travel dollars on sending faculty members to VAS meetings.9 Most disheartening, at the spring meeting of the Executive Committee two months later, President Gerald Taylor informed the Academy's leadership that letters sent to approximately 1100 VAS members asking them to recruit new members had resulted in less than a three-percent response. 10 As he had proposed over the past several years, Carvel Blair of Old Dominion University suggested sending information to various state agencies.

Acting on Blair's suggestion, Seibel forwarded an informational letter to all state agencies, hoping to identify persons interested in joining the Virginia Academy. As with the letters to the pre-med advisors

and department heads, six months later Seibel reported a complete lack of response. Responding to this unfortunate news, the Executive Committee asked every Council member to commit her/himself to personally recruit one new member. In addition, Council discussed the possibility of giving students membership in the Academy as a gift.<sup>11</sup>

It is difficult to estimate the efficacy of the Membership Committee in the first half of the 1990s, although from 1990 to 1995 regular membership declined by only three percent, certainly a considerable improvement over the twenty-percent drop from 1985 to 1990. And while the 2000 numbers will most likely rise, according to Jim Martin, if past trends continue, at the present time it does not appear that in the near future there will be a rapid escalation in regular membership numbers. For, as Elsa Falls remarked:

In my personal opinion, the VAS is suffering from a loss of prestige. It is not getting support from major research universities, especially the University of Virginia, though they are still getting support from Tech....In all honesty, many members are more mature members who are getting ready to retire. Younger members [of colleges and universities] are not as interested in a state association, the reason being that the people who decide who gets tenure often feel that they [younger scientists] are wasting their time with a state organization. With email, and the web, and the sort of community that there is today, a state organization is of less importance.<sup>12</sup>

Yet, as Falls continued, the VAS increasingly is filling a very important professional need — that of faculty at the smaller private colleges, liberal arts schools, and community colleges as well as graduate students. Thus, as it had periodically throughout its long history, the VAS had shifted its aim — consciously or not — to serve another population of science practitioners and educators. As Gerald Taylor of James Madison University remarked: "I really think the mission [of the VAS] is the same, but perhaps the audience has changed."<sup>13</sup> When one examines the student membership numbers from, for example, 1985 to 2000, the service the VAS is providing students is especially apparent. For example, in 1980, 138 students participated in the Academy sections; ten years later, the number had doubled. In 2000, the number of students continues to rise.

# Sections

As Council discussed the waning regular membership, sections, too, focused on their own viability. At the November 1990, meeting of Council, Stewart Ware pointed out that the Agriculture and Forestry Section had not met for two years and, in fact, its chair had indicated in 1988 that the section would soon dissolve. Why, then, was the Section still a recognized group of the VAS? Indeed, according to the Academy's constitutional procedure, any section not meeting for two years in a row necessarily forfeits its standing as a recognized entity of the Virginia Academy of Science. In response, chair of Local Arrangements Golde Holtzman indicated that he would like to give the Agriculture and Forestry Section a chance to organize for the 1991 annual meeting at Virginia Tech — especially since a large percentage of agricultural scientists in Virginia worked in Blacksburg and could, perhaps, be persuaded to participate in the annual meeting. As a means of negotiating between these two views, Council asked Secretary Blanton Bruner to write a letter to the recent officers of the Agriculture and Forestry Section — those who had held office from 1987 to 1988 — asking them to advise Council whether the group should be dissolved.14 Council accepted the officer's advice: the Section would meet in 1991, but only to hold a business meeting. And, as Holtzman commented: "The business meeting allowed us to keep the section alive. The next year someone worked on getting a meeting together and it worked!"15

Not all of the November 1990 meeting of Council, however, was filled with talk of section decline; in fact, much of the deliberation of Council focused on section expansion. In September 1990, James O'Brien, psychology professor at Tidewater Community College and chair of the News and Information Committee, had written to Mark Wittkofski, a representative of Virginia Archaeologists, asking him about the possibility of starting an Archaeology Section. Wrote O'Brien:

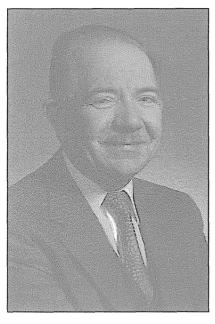
I'd really like to see an Archaeology Section in the Academy. By combining resources, I think we would all be able to contribute more substantively to Virginia and to the integrity of our professions. Virginia archaeology could certainly reach a large and receptive audience too. . . . I'd also like to see more archaeological education in junior and senior high schools in Virginia. By establishing an Academy Section, archaeologists could take advantage of our Junior Academy programs. <sup>16</sup>

Wittkofski and his fellow archaeologists responded positively, and were introduced to Council at the November meeting. For Wittkofski and his fellow archaeologists, the Virginia Academy of Science offered the opportunity to mingle in a professional, yet friendly, interdisciplinary environment. Stated Wittkofski: "The Virginia Academy of Science seemed to be an opportunity to link archaeology, which is interdisciplinary in nature, with outside disciplines — to work with scholars in other fields yet doing related scientific studies — and maybe to do some outreach projects."17 Wittkofski offered to serve as program chair for the proposed section until a business meeting could be held to elect officers. Five years later, thirty-five to forty people participated in the Archaeology Section, the majority of whom represented William and Mary, Radford College, Mary Washington College, and the Virginia Forest Service. Approximately one-third of the attendees were graduate and undergraduate students. According to Wittkofski, rather than being "discriminatory", the section "welcomes student's participation," viewing their group as a "good stepping stone" or a "good way for students to get their feet wet, especially in a localized setting where the feedback is friendly and positive."18 Such a perspective mirrors the changing internal composition and nature of the Virginia Academy of Science.

Joining the archaeologists at the annual meeting in 1991 were the computer scientists. Like the archaeologists, the computer scientists were seeking an interdisciplinary, non-threatening environment in which to exchange research with their peers throughout the state. <sup>19</sup> After several years of lobbying for a section, Computer Science finally garnered a sufficient number of participants to organize and hold its first meeting. President-elect Gerald Taylor of James Madison agreed to serve as organizer for the computer science group. <sup>20</sup>

The following year, President Taylor informed Council of several inquiries into the possibility of establishing a Geography Section — a discipline not discussed as a possible section since the early seventies. As with the Archaeology Section, O'Brien was responsible for the initial overtures. Writing to Don Zeigler of the Political Science and Geography Department of Old Dominion University, O'Brien stated:

The VAS publishes the *Virginia Journal of Science* (which also goes to about 55 overseas subscribers), supports research through grants and holds an annual meeting



Michael Kosztarab, entomologist at Virginia Tech, was selected a Fellow in 1975. He was active in the efforts to establish both the Science Museum of Virginia and the Virginia Natural History Museum, and was instrumental in creating the Natural History and Biodiversity Section in 1994.

which is a great training ground for undergraduate and graduate students as well as a professional forum . . . I'd really like to see a Geography Section in the Academy.<sup>21</sup>

Enthusiastically, Council invited the geographers to organize at the University of Richmond during the 1992 annual meeting. Another new section, Natural History and Biodiversity, was initiated in 1994. Sponsorship of the section by the Virginia Natural History Society was encouraged by the leadership of the society's past president, Michael Kosztarab, and James O'Brien, president of VAS. Given this high level of section activity, it is entirely possible that the "section-decline" phenomenon resulted from a shifting of disciplinary focus within Academy membership rather than a large loss in overall membership. During the late nineties, a membership surge in the chemistry section was balanced by a decline in botany, lending support to the idea of a "section-shift."

# News and Information Committee

In May, 1990, President Brandt brought before Council a concern of long-time member and a past-president of the VAS, Vera Remsburg. Specifically, Remsburg felt that members of the Academy were losing contact with one another. Accordingly, Remsburg believed, the VAS needed to develop a system by which communication among members would be enhanced. Perhaps a newsletter might be helpful, she suggested, sent periodically to all members and in which Virginia Academy activities would be highlighted. Council's response to Remsburg's idea was positive.

Shortly thereafter, Academy President Richard Brandt announced that James O'Brien would head the News and Information Committee, with the job of editing a new newsletter, titled *Virginia Scientists*, as a primary responsibility. According to O'Brien: "The primary goals of the *Virginia Scientists* are to tie in closer the annual meeting and the four issues of the *Virginia Journal of Science*; to sustain the existing membership; to publicize the Academy; to attract new members; and to attract those in power or at least have them pay attention to the activities of the Virginia Academy."<sup>22</sup> Two issues per year would be strictly Academy news, sent to each member regardless of section affiliation and to the department heads of every science and technology department within Virginia's colleges, universities, and relevant corporations. Other issues would be sent solely to Virginia Academy members at critical points during the year as a means by which, for example, calls for papers would be reinforced or election ballots would be distributed.<sup>23</sup>

Diligent and hard-working, O'Brien proved to be an excellent choice to head the News and Information Committee, and hence to initiate Virginia Scientists. Five months after President Brandt appointed O'Brien, the new leader distributed a written report to Council in which he suggested actions which, if followed, might lead to the improvement of the newsletter. Among other points, O'Brien requested that the committee itself — along with any member of Council — write articles for the newsletter regarding issues ranging from Academy activities to higher education. In addition, O'Brien made it a point that he was preparing to use the Virginia Scientists "not only to strengthen current membership but also to encourage annual meeting exhibitors and prospective members."24 Cognizant of the need to expand the network of the Virginia Academy of Science, O'Brien asked for suggestions as to who should receive complimentary copies of Virginia Scientists. 25 In response to O'Brien's growing load as chair, beginning in 1991, Academy member Greg Cook, also a member of the Tidewater Community College faculty, co-chaired the committee with O'Brien, taking over a substantial amount of the editing of Virginia Scientists.

On November 17, 1991, O'Brien announced that the newsletter seemed to be providing excellent publicity for the Virginia Academy of Science. O'Brien informed Council that the newsletter's recipients included fifteen to twenty state departments and the governor's office, members of the VJAS Committee, and the presidents of all public and private colleges and universities in the state. After considering the "master list", Arthur Burke moved that *Virginia Scientists* be sent to all state legislators. Michael Bass seconded the motion. In the fall of 1996, Dean Decker proposed that he coordinate an effort to send the newsletter to all state academies of science and, in turn, the VAS might receive those of the other organizations. As the editor of the newsletter for the National Assocation of the Academies of Science, Decker was ideally situated to initiate such interaction.<sup>27</sup>

When the Virginia Academy elected O'Brien as president-elect for the 1992–93 year — no doubt a decision influenced by O'Brien's commitment to increasing the visibility of the Academy — Greg Cook assumed primary responsibility for issuing *Virginia Scientists*. When, on November 5, 1995, Cook's tenure had run its course, he announced to Council: "You've all noticed I have had trouble getting an issue out lately, but there is one in the works that should be in your hands soon. My term expires in 1996. Please be thinking about a replacement." By 1996, William Cunningham, also of Tidewater Community College, had taken over the helm.

As Rae Carpenter stated recently: "The concept behind the Virginia Scientists was and remains an excellent idea."29 And, as O'Brien has been quick to point out, given the right coverage and focus that would appeal to younger scientists in the state, the newsletter might prove to be an important marketing tool, slowly informing a generation that seemingly does not have a stake in the existence of the Virginia Academy of Science of the benefits of participating in a statewide, non-disciplinary, scientific association.<sup>30</sup> Additionally, Virginia Scientists — with its "expandable" audience — provides a useful venue through which to commence initiatives. When asked about feedback from people outside the VAS — for instance, presidents of colleges and members of the General Assembly — to whom the Academy sends the newsletter, O'Brien answered that there never was any feedback per se. However, the newsletter did "give the Academy another medium in which to put themselves." O'Brien also pointed out that, when he was editor, he looked for opportunities to run pictures of the university and college

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presidents or outstanding delegates in *Virginia Scientists*, for while it is "really hard to say what the impact of that might be, it can't hurt."<sup>31</sup> Greg Cook's experience revealed — as is the case in so many volunteer efforts — that the editorial job is a time-consuming and formidable one, a situation, as James O'Brien commented, in which ultimately institutional support, at the very least in the form of release time, is always necessary. For his steadfast service to the Academy, O'Brien was named a Fellow in 1998.

Greg Cook did not sit on the sidelines for long, however, as he initiated the creation of a web site for the Virginia Academy of Science. Offering his time and skills even before vacating his editorial position, he stated:

...I can offer the Academy a web site at no cost to the Academy, and I am heavily involved in that type of debris at this point in my life. I think this is something that would benefit the Academy. We're talking about publications in general entering a new age, where print is no longer the only way to get information out.<sup>32</sup>

In 1998, Jim Martin, also editor of the *Virginia Journal of Science*, lent his expertise to the development and maintenance of the Academy's web site. By 2001, the organization's web site stands as a clearing house for scientific information in Virginia. Not only is all senior and junior Academy business on the web — rendering access to all aspects of the VAS, including programs such as the Visiting Scientists and Science Advisory Board — but also immediate links to the Science Museum of Virginia and the Virginia Association of Science Teachers. The relationship with the Science Museum of Virginia extends to the Virginia Science Resource Network which, accessible via the web, provides connections among those people and entities interested in promoting science within the state. The Academy has ideally situated itself to attract those committed to science and especially science education in the Commonwealth.

# Ad Hoc Committee on the Environment

Despite a long history of support for and interest in environmental questions, from the late 1970s on, the Virginia Academy of Science focused less on environmental issues than in the past. Finally, in No-

vember, 1990, Virginia Tech's Golde Holtzman suggested the formation of an Ad Hoc Committee on the Environment, the function of which would be "proactive." According to Michael Bass of Mary Washington and a member of the new committee, by "proactive" the committee intended to "go forward and propose things . . . not wait around."<sup>33</sup> President Brandt appointed the committee, with Carvel Blair of Old Dominion University as chair along with J. James Murray, Jr. of the University of Virginia, Robert Rose of Old Dominion University, Michael Bass, and Golde Holtzman.<sup>34</sup>

Five months later. Blair informed Council of the committee's first project: reviewing the report of a field test by the scientific business WISTAR of a rabies glycoprotein recombinant vaccine on wild raccoons on Parramore Island in the Nature Conservancy's Eastern Shore Reserve. To loosely reconstruct the facts, upon learning that the state did not have a third-party agency overseeing the field test, Blair volunteered the services of the Ad Hoc Committee on the Environment. 35 As Blair outlined, the committee was impressed by the "careful and thorough nature of the field test." All the same, they concluded that three recommendations should be sent to the Commissioner of Health, C.M.G. Buttery, the Virginia Conservancy, and the Virginia Department of Game and Inland Fisheries. First, that the Commonwealth should require a more complete final report from WISTAR — one that would provide the exact protocol by which the experiments had taken place. Second, that WISTAR or a state-appointed board should conduct a long-term study to determine any continuing effects of the field trial. And third, that decisions to adopt the vaccine for primary rabies control should be deferred unless a further study could demonstrate that the benefits exceed the costs.<sup>36</sup> Despite the efforts of the VAS, archival research and interviews do not reveal any public acknowledgment by the state agencies of the Academy's three recommendations.

# Virginia Journal of Science

Under the able editorship of James Martin, the *Virginia Journal of Science* remained on steady ground. Not only did Martin continue to use the latest computer technology (see Chapter Five) to ensure the professional quality of the *Journal*, but he also gave consideration to increasing its readership by academics. For example, in 1990, the *Journal* published the "Proceedings from the Old Dominion University-Is-

rael Science Conference," March 5–7, 1990.<sup>37</sup> That same year, the winter issue contained the full "Proceedings of the Symposia on the Biota of the Virginia Barrier Islands." The papers thus printed represented the most comprehensive introduction available to the biota of the Virginia barrier islands.<sup>38</sup> Given his steadfast service to the Virginia Academy, it is not surprising that at the annual meeting in 1990, James H. Martin was elected Fellow of the Academy.<sup>39</sup>

Stewart Ware, editor of the *Journal* immediately prior to James Martin, continued his quest to raise the level of acceptance of regional journals by colleges and universities in his article printed in the spring 1990 issue. In "Prestige and Impact *vs.* Usefulness in Biological Journals or Am I Just a Regional Kind of Guy?," Ware began by stating:

The impact factor and citation half-life for scientific journals, as calculated by Science Citation Index, is used by some college administrators and department chairs to indicate prestige of a journal, and thus the 'significance' of articles published in these journals by faculty members. Regional journals, published by associations or societies interested in the botany or natural history of specific geographical areas, are likely to have lower impact factors and thus lower prestige than journals with national or international geographical coverage.<sup>40</sup>

Certainly Ware was "telling it like it is," with the hope that readers would respond by noticing that, prestige or not, a regional journal's coverage was of more actual interest than the material contained in the national and international journals. When asked whether or not he thought scientists were "listening" to the point of his article, Ware responded that he could not give a precise answer; however, he felt that certainly his article had "gotten scientists to start thinking in that direction," which is "all a person can ask for."

# Science Education

Entering the nineties, the Virginia Academy of Science did not sway in its firm commitment to improving the quality of science education in the Old Dominion. According to James O'Brien, the "growing concern [in the 1990s] over science education has turned the Academy leadership toward a more activist role." As it had for so many years, the

Science Education Committee continued its collective support and sponsorship of the Virginia State Department of Education Science Teachers' meeting, which, by the 1990s, drew approximately 700 to 800 teachers from all areas of the Commonwealth. In addition, the VAS began to branch out into different areas of sponsorship. In 1991, President Brandt announced that he had received from Elskie Smith, Dean of Humanities and Science at Virginia Commonwealth University, a request that the Virginia Academy of Science participate as a co-sponsor in a statewide symposium in the fall with undergraduate students and others presenting their research, as part of the Annual Virginia Alliance for Minority Participation in Science and Engineering. Brandt also read his response agreeing to co-sponsorship — which would entail use of the Academy's name and their volunteer support — explaining the necessity for response on short notice without prior Council approval. Unanimously, Council affirmed the president's action.<sup>43</sup>

As it had for over a decade, the Virginia Academy of Science sponsored the Visiting Scientist Program, designed to bring the ideas of science through demonstration and lecture to high-school students. The program continued under the direction of chemist Harold Bell of Virginia Tech. According to Bell, throughout his tenure as director the program had "basically gone along at the same rate. Some of the teachers in the state are very diligent about using the Program and some teachers do not want anyone in their class. It is like they are terrified to have someone looking at what they are doing." Bell acknowledged the difficulty in judging the actual use of the program by the teachers, stating "schools are notoriously bad in responding. We even include a 'Report of Visit Form' for them in the Visiting Scientist 'Brochure' we send out. Any type of number someone gave you would just be a wild guess." "

Following Bell's resignation in 1992, the Academy recognized his dedication to their association by honoring him with the Distinguished Service Award.<sup>45</sup> To replace Bell, President Golde Holtzman selected Jack Cranford, also of Virginia Tech. Cranford worked diligently to expand the program to other groups besides secondary schools, such as 4-H clubs and civic groups.<sup>46</sup> Cranford expressed the same concern as Bell: the lack of response from schools that a scientist had visited. Cranford, however, went one step further, remarking that in some sense, the program was a "terrible success." In 1993, for example, he sent out two thousand booklets to schools in Virginia and inserted tear-out cards for teachers to send in after a visiting scientist came to their classroom.

Only twenty-five schools responded. Furthermore, commented Cranford:

...many teachers say that it is difficult to have a scientist come in because they are so constrained. If the scientist cannot come and talk to all five of their classes then they don't want him because it will mess up their schedule. . . . Their expectations versus what we could give are entirely different. It is my opinion that unless we get more feedback from users, we are not getting very far.<sup>47</sup>

While Cranford never doubted the efficacy of the program when scientists actually visited a classroom, he strongly advocated that the VAS reassess the program.<sup>48</sup>

In late May of 1995, support for science education attracted new attention within the scientific community, as Richmond, in yet another attempt to save monies by reducing the amount earmarked for education, debated the idea of decreasing the amount of time students must spend in a laboratory, particularly in the general education science courses. In addition, Richmond advocated replacing actual time spent in a laboratory with time spent merely viewing a video of a laboratory experiment. With the support of Academy President Elsa Falls, biologist Marion Lobstein of Northern Virginia Community College introduced a resolution on the "Importance of Laboratory in Science Education" for the VAS to send to the General Assembly. In her resolution, Lobstein denounced the current trend in the Commonwealth to "do away" with the laboratory experience before outlining the vital importance of the laboratory experience in science education. Specifically, she wrote:

Science is a study of natural phenomena and requires a laboratory component which permits and encourages discovery and creativity. Science faculty welcome electronic technology as a potentially effective tool to expand and enhance instruction. However, it can neither duplicate nor replace learning experiences afforded to students through hands-on lab and field activities. ...In summary, the knowledge gained from science courses with a strong laboratory component enables students to understand in more practical and concrete ways their own physical makeup, the functioning of the natural world around them,

environmental issues, etc. It is only by hands-on lab experiences that the brightest and most promising potential science majors will be stimulated and not turned off by lecture-only approaches to science....

Council readily endorsed the resolution.

The VAS did much to publicize Lobstein's resolution, printing it in its entirety both in the Virginia Journal of Science and Virginia Scientists, forwarding it to all institutions of higher education in Virginia and to the appropriate government officials, and ensuring its positive review by Beverly Orndorff in the Richmond Times-Dispatch. 49 President Falls revealed that she had sent out more than one hundred letters containing the resolution. Most discouragingly, of the more than one hundred letters sent out, she received just one response and that was from Gordon Davies, Director of the State Council of Higher Education (SCHEV). Falls commented that he had thanked her, writing, "We agree with you, and urge that students have laboratory experiences in science courses."50 Polite though it was, there was no commitment in Davies' letter to the classic pedagogic model supported by the Virginia Academy: that each semester of each science course should include a regular laboratory section. Upon hearing Davies' response, Academy member Joe Rudmin commented, "That is not very supportive." "At least he responded," countered Falls, "No one else even did that."51 Unfortunately, however, pressured by the need to control costs in higher education, SCHEV decided that the general education science requirement for a laboratory session with each science course no longer was necessary.

Why, one must ask, were there so few responses? And why did so few people pay attention to a VAS spokesperson? According to Jim O'Brien, it was "simply politics and economics and not surprising, given the current administration and their cuts to education. We [the Academy] did not agree with what they were doing. Why would they pay attention?"<sup>52</sup> Lab sections are labor-intensive and costly; many universities do not award the same units of lecture hour equivalents (LHEs) to the time spent by professors or by teaching assistants (TAs) in labs as in lectures. A single TA or professor usually teaches only about twenty-four lower-level undergraduates in a general education lab; the same TA or professor might teach as many students as a classroom can hold in less time, for less money, and for more credit. Clearly, stated O'Brien, labs are important. "If you want a person to be a scientific leader, you

do not have them pipetting for the first time in graduate school. This was pure politics — a hard ball game . . . take money from labs and put somewhere else in the budget. . . . The Virginia Academy has a political stance that is quite different from the Allen Administration in terms of matters focusing on science education."<sup>53</sup>

# Virginia Junior Academy of Science

In March 1990, Dean Decker, Director of the Virginia Junior Academy of Science, reported that the students had submitted approximately 1441 papers, from which 635 were selected for oral presentation at the annual meeting of the VJAS.<sup>54</sup> While the number of submissions — two hundred more than the previous year — was a cause for celebration, it also created logistical problems, exacerbated by the membership decline facing the Senior Academy. Addressing these concerns after the May 1990 annual meeting, Decker stated:

The number of juniors is getting harder to accommodate. The administrators will say they would love us to come to their campus and we will have their support, but too often the support is in words and not actions. We had an awful time getting sufficient judges. As a result, we had a number of sections running with two judges, we have a number of cancellations and we have ten no-shows today. We normally fill in with Academy members and people from other institutions. We have very few from either. In many schools, publishing seems to be the main goal, not state meetings. And, if a university has adopted a philosophy that everybody better be doing research and not these activities, then we can't get faculty support. That's what administrators are saying. As a result, we have a problem.<sup>55</sup>

Reacting to Decker's statement, President Bass suggested that "one of the things we are seeing is the state budget crunch, because money is allocated per faculty or per department to go to meetings, with emphasis on research and presentations at national and regional meetings." In addition, Council pointed out that the size of the VJAS — which, as evident from Table 6.2, which documents participation in the Junior Academy beginning in 1981, was not trivial — did pose legitimate problems for many colleges and universities.

Table 6.2. VJAS Participation<sup>57</sup>

Year	Papers	Papers	Attendance
	Submitted	Presented	
1981	373	212	400
1982	497	335	450
1983	612	349	658
1984	819	454	1298
1985	1018	538	1395
1986	1218	613	1030
1987	1376	668	1519
1988	1416	620	1219
1989	1356	602	1139
1990	1441	635	847
1991	1440	672	920
1992	1447	705	1020
1993	1694	710	1100
1994		687	1020
1995	1880	625	
1996	1849	761	1100
1997	1954	766	1081
1998	1908	750	1222
1999	1833	792	950
2000	1696	638	910
2001	1551	724	1007

It is not surprising — given the escalating problems in negotiating the VJAS's annual meeting — that the concept of regionalization remained a central item on Council's agenda. In fact, two months prior to his frustrated report in May, Decker had reintroduced the question of regionalization in the future of the Junior Academy before the Executive Committee. As Decker explained, regionalization certainly was feasible. The subcommittee appointed by President Brandt in 1989 to review regionalization had concluded that loosely following Virginia's seven superintendent's districts would provide a starting point. As Decker informed the VAS leadership:

We have divided three of those districts. The Richmond area and south, which is a very large district, has been subdivided into A and B. The Tidewater district has been

divided into A and B. B involves James City County, Williamsburg, all of Newport News (everything between York and James Rivers) and leaves Southampton County, Isle of Wight, Chesapeake, Norfolk, Portsmouth and the Peninsula in Part A. Superintendents district four is divided by putting Fairfax County, Fairfax City, Arlington, Alexandria, and Falls Church into one district because they are so concentrated. So we end up with ten Junior Academy districts. This is favored by the Committee. <sup>58</sup>

While there would be a regional director in each of the districts, Decker allowed that there would still be a central, overseeing body of the VJAS, led by a paid director, to run four basic operations: the state meeting; the training and supervising of volunteers; the relationship with the national organization; and the overseeing of finances, to include securing grants and other types of financial support.<sup>59</sup> If this proposal were accepted and funding were available, asserted Decker, the new director would take over after the Blacksburg meeting in 1991 and the regionalization would go into effect.<sup>60</sup>

Decker was careful to point out two major issues: fitting magnet schools in with the regions and raising enough money to fund the position of paid director. He reminded the group that, in May of 1989, the VJAS had retained a fund-raising consultant, Mary Ellen Stumpf, formally of the Science Museum of Virginia. Decker appeared confident that she had things "under control" and within a few months, at least, the VAS should "know where this campaign is leading." Relative to the former issue, Decker reminded the committee that, in Virginia, those gifted and interested in science and mathematics are invited to attend magnet schools with accelerated programs in those subjects. The VJAS subcommittee, Decker explained, had expressed concern over the fairness of having a magnet school compete either in a district against nonmagnet schools or else as a separate district. President Michael Bass asked Ertle Thompson, a specialist in science education, for his opinion. Stated Thompson:

Well, it presents problems either way you go. Many people in the chemistry section complained the last two years. A few people were so adamant that they said: "We are not going to compete anymore with students from Thomas Jefferson [a magnet school]. On the other hand, since basketball tournament time is approaching, it is like

taking your top ten teams and saying that you are going to play a round robin tournament. Then select the winner of the round robin from that group to play the rest of the fifty-four teams that are in the NCAA tournament. If you have the best students from these magnet schools and eliminate all but one to four of these students by internal competition then you are really excluding qualified students. It is discrimination in the opposite direction. . . . 62

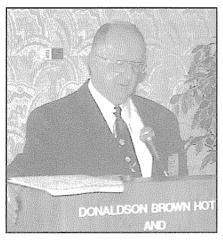
While Thompson's response certainly provoked discussion, Council could not reach a firm decision on the place of magnet schools in the structure of regionalization. Secretary Gerald Taylor moved and Elsa Falls, treasurer, seconded, however, that the proposed redistricting be approved *in principle*.<sup>63</sup> Until the VAS could locate a VJAS director, however, Council agreed to put the concept of regionalization "on the back burner." Accordingly, they appointed a Search Committee for a VJAS director, and Ertle Thompson agreed to be its chair. In addition to Thompson's new committee, Council asked the VAS-Futures Committee, chaired by Rae Carpenter, to work on the search process. The involvement of Carpenter and his committee would prove to change the context of the search.

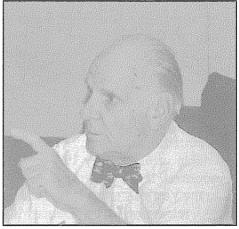
Several months later, at the end of June, Carpenter wrote to the Director of the Science Museum of Virginia, Paul Knappenberger. After explaining that the VAS was anticipating the retirement of its Executive-Secretary Treasurer, Blanton Bruner, Carpenter reminded Knappenberger that in the early seventies Bruner had elected to have his office at the University of Richmond rather than at the proposed Science Museum. Continuing, Carpenter explained that with the appointment of Bruner's replacement, the Academy was again interested in space at the SMV. Furthermore, the duties of the replacement would either be expanded or another person might be employed to assist the Junior Academy. Finally, Carpenter stated:

By this letter I am exercising the privilege of a Chairman emeritus to urge the Board [of the Science Museum] to consider positively any request from the VAS to reinstate its office privileges at the Museum. Most current Board members are perhaps unaware that the legislature, in establishing the study commission for the Museum in 1969, failed to provide funding for the two-year study. Dr. Hughes personally recruited donors and then requested the

Academy receive and disburse those donated funds for such purposes as the commission might approve. Because the Museum is, in large measure, a child of the Academy, it seems quite appropriate that the VAS offices be located there.<sup>64</sup>

Shortly thereafter, Knappenberger responded, as did Anthony Troy, Chairman of the Board of Trustees of the Science Museum in a similar fashion, that pending approval of the Attorney General's Office — which





Directors of the VJAS 1980–2001:

Dean Decker (left), University of Richmond, directed the VJAS from 1980-1992; among other leadership roles for the academy, he served as VAS president (1996–1997).

Don Cottingham (upper right) was director of VJAS from 1992–1997.

Following a year of shared leadership by Cottingham and Dean, Susan Booth (right) served as co-director with Cottingham in 1999 and became director in 2000.

Both Cottingham and Booth have careers in science education in the public schools of the Commonwealth.



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they both felt would not pose a problem — and once suitable space was located, the VAS would be welcome in the Science Museum. $^{65}$ 

Not only was the Science Museum willing to share its space with the Academy, but also a paid position. In November 1990, President Gerald Taylor summarized for Council both the activities of the VAS-Futures Committee and the VJAS Director Search Committee. At a special meeting on July 20, 1990, at Graves Mountain Lodge, the Executive Committee of the VAS had approved in concept a verbal proposal to the Virginia Academy of Science from Paul Knappenberger to establish a Junior Academy Director/Science Education Liaison Position with offices and staff working out of the Science Museum of Virginia. In other words, the Science Museum would sponsor a part-time director for the VJAS. According to the proposal, the Science Museum of Virginia would fund the position through state monies marked for the Science Museum of Virginia.

Following Taylor's summary, Carpenter outlined the tentative plans for the VJAS Director/Science Liaison position, including the eventual relocation of Virginia Academy offices to the SMV. Obviously, he pointed out, definitive information on the position would not be available until January 1992, when the governor's budget would be announced. If the General Assembly allocated money for the position, then the Virginia Academy of Science would proceed with plans as proposed, relocating to the Science Museum and sharing the position with that public institution. If the Legislature did not fund the position, the VAS would still hire a VJAS director, but the position would be volunteer until the Fund Raising Committee had secured a sufficient endowment to support a salaried director.

Following Carpenter's remarks, Ertle Thompson handed out copies of his Search Committee's report. Like Carpenter's, Thompson's suggestions concerned the proposal from the Science Museum of Virginia for the joint position. Thompson especially wanted Council to consider a discrepancy between Science Museum of Virginia documents and Virginia Academy of Science documents relative to the wording of the proposed position. In the Search Committee Report, the position is referred to as the SMV/VAS "Scientist in Residence" and VJAS Director, whereas in communications from the SMV, the position is referred to as the Science Outreach Coordinator. Finally, Thompson said that if the position were to be funded, the expectations of the staff of the Science Museum were that the position would be filled by a Ph.D. scientist or math-

ematician. Thompson recommended on behalf of the Search Committee that Council approve in concept the joint position of SMV/VAS "Scientist in Residence" half-time and Director of VJAS half-time at the Science Museum of Virginia. <sup>69</sup> Council followed Thompson's suggestions, after which Council named Dean Decker VJAS Interim Liaison to attend Council meetings for 1992 and 1993 with privileges of the floor. <sup>70</sup>

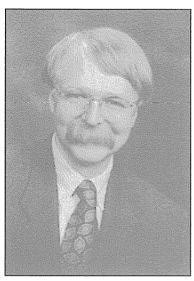
Paul Knappenberger resigned as Director of the Science Museum July 1, 1991, at the end of the fiscal period. Over the following year, Gerald Taylor and members of the VAS-Futures Committee negotiated with the Interim Director, Betty Blatt. Early in March of 1992, President Taylor reported that members of the VAS-Futures Committee had met with representatives of the State Legislature at the Science Museum in January. Delegate Earl Dickinson formally agreed to introduce a budget amendment to fund the VJAS Director/Scientist in Residence position. As it turned out, according to Taylor, the Science Museum had authorized three doctoral positions in its overall structure — one for the Museum director, one for the director of education, and one which was unspecified. Accordingly, the unfilled position was billed as the VJAS Director/Scientist in Residence.

Based on data gathered at the meeting, the Futures Committee offered three recommendations to Council. First, while at any time VAS offices could be moved to the old Broad Street Station in Richmond that housed the SMV, the committee felt it best to delay the move until the VJAS Director position was clarified. However, the committee did recognize the necessity of constantly reaffirming the Academy's intent to centralize operations at the Science Museum. Second, the VAS's Executive Secretary-Treasurer and a new position of Assistant Executive-Secretary Treasurer would be housed at the SMV. With respect to the latter position, Carpenter indicated that the committee had identified an appropriate individual, long-time member Arthur Burke, who had agreed to serve as a volunteer "learning apprentice" for one year, following which he would serve for three more years as an "emergency stand-in" if needed. The committee further suggested that the Executive Secretary-Treasurer position remain part-time. Third, the committee recommended that there be a definition or re-evaluation of the position of Secretary-Treasurer, but that redefinition be tabled until the VJAS director position was worked through completely.<sup>72</sup> Slowly, the Academy was beginning the initial steps of overhauling its administration.

At the same meeting, Thompson, again speaking on behalf of the VJAS Search Committee, announced that in anticipation of the fact that the status of the paid joint VJAS Director/Science Liaison position at the Science Museum of Virginia would not be clarified for at least several additional months and possibly longer, the committee had worked to identify a volunteer to serve as an interim director. Stringent financial conditions, unfortunately, had not provided a good environment in which to conduct a search, and Thompson revealed that none of the state colleges and universities contacted through potential candidates for the position was willing to make a commitment of release time or space. Accordingly, the committee recommended that Donald Cottingham, a retired chemistry teacher from the Tidewater area who had worked extensively with the Junior Academy and a person amenable to the position, be appointed the new volunteer, interim Director.<sup>73</sup> In the midst of these intense discussions concerning its future, the VJAS celebrated its fiftieth anniversary. An important highlight of the festivities was the presentation of the Ivey F. Lewis Award to Robert Dean Decker. Since 1981 the VJAS director, Decker had dedicated much of his time to establishing the Virginia Junior Academy of Science as one of the top junior academies in the nation.74

Midway through 1992, the Board of Trustees of the Science Museum of Virginia named Walter Witschey as its new Director, while Betty Blatt assumed the post of Director of Science Education. When the budget came through in 1993, the legislature did not allocate money for the joint position. Blatt, however, advocated proceeding with the position, recognizing that the slot would be funded as a full-time Museum position, and the Museum initiated a search. In the summer of 1993, a woman scientist was hired; Carpenter and Fred A. Diehl, a VAS member and SMV Board member, participated in the interview process. Internal problems, however, forced the Museum to initiate a second search to fill the position in February 1994, without VAS representatives at interviews. Accordingly, the SMV hired Gene Maurakis, an ichthyologist from the University of Richmond, to the position of Science Museum of Virginia Staff Scientist and Associate Director of the Virginia Junior Academy of Science; his duties were to begin on August 16, 1994. The VAS relocated to the SMV, hiring Lisa Martin with VAS monies to maintain the office of the Academy and to assist Maurakis when necessary.

From the beginning, the joint position was fraught with difficulties, by and large stemming from miscommunication between the Sci-



Tom O. Sitz of Virginia Tech served as president of the Academy during 1995-1996. He is an active member of the Chemistry Section and with John Hess co-chaired the local arrangements committee for the 75th Anniversary Meeting.

ence Museum and the Virginia Academy as to the exact nature of the job. While the description of the position specifically called for a fifty-fifty split between the two organizations, in reality both seemed to demand one hundred-percent of Maurakis' time. In addition, simultaneously working for a state agency with paid staff and an almost solely volunteer association posed problems in terms of what Maurakis could expect or "require" those working with him to do. Finally, Maurakis entered the role of Associate Director of the VJAS without having ever fully observed or participated in the events leading up to an annual meeting of the VJAS, much less the meeting itself. The joint position lasted until July 1, 1995, whereupon Maurakis's duties shifted to a full-time "Scientist in Residence."

In November of 1995, President Tom Sitz outlined for Council the events that led to Maurakis's departure as Associate Director of the Virginia Junior Academy of Science. During the early summer, members of the Ad Hoc Committee to Review the Position of the VJAS Associate Director — a committee established immediately after the annual meeting and chaired by Rae Carpenter — had convened at the Science Museum to review both the position of associate director, which both sides understood to be less than desirable, and the current relationship between the Museum and the Academy. As Sitz stated:

[T]he meeting was taken over by Walter Witschey, and he presented us with an ultimatum that the operation of the Junior Academy would be taken over by the Science Museum, or we would lose the half-time position of Gene Maurakis.<sup>77</sup>

Following Sitz' brief remarks, Rae Carpenter, Chair of the Ad Hoc Committee to Review the Position of the VJAS Associate Director, explained the course of events referred to by Sitz. Carpenter said that some time between June 13 and June 26, 1995, President Tom Sitz had received a fax from Witschey in which he suggested that the Academy VJAS Committee serve as a policy board and that Maurakis and his staff from the Science Museum be fully empowered to run program operations. In support of this proposal, he said that "slippage we experienced, including Lisa's [Lisa Martin, the part-time office secretary] lack of availability at the VJAS office, prevented us from achieving our best." Witschey contended that either the director should be fully empowered, or else the SMV should be fully empowered, to accomplish the program goals. If this were the case, the Science Museum of Virginia would assign appropriate resources to see that tasks are accomplished, instead of "support sometimes supplied to a faculty VJAS director." He also remarked that the Virginia Academy of Science could then focus on setting policy, and not have to be concerned about whether the secretary were in by 8:30 in the morning to answer the phone.<sup>78</sup>

On June 26, the Committee met and drafted a letter to Witschey responding to his ultimatum levied at the meeting and to his subsequent fax — in which, they pointed out, that while Maurakis had performed quite well in organizing the VJAS judges for the annual meeting, non-VJAS duties during April and May had resulted in his being overloaded and unable to deal efficiently with Junior Academy demands as the annual meeting drew near. Such non-VJAS duties, especially during April and May, perplexed the Virginia Academy, as it was its understanding that fifty-percent of Maurakis's position was to be devoted to the VJAS; the timing of the meeting was certainly no secret, and in Maurakis's yearly calendar, the SMV administration should have foreseen the springtime VJAS demands would be quite high. In addition, the committee did not agree that it was in the best interest of the Virginia Junior Academy of Science to empower the Science Museum to run its programs, even if it meant that Maurakis could no longer be available for any VJAS activities. The current direction of the VJAS was

moving towards regionalization, pointed out the Ad Hoc Committee, with initial discussions over a pilot program in Danville at the beginning stage. Witschey did not back away from his ultimatum; hence, on July 1, the position ceased to be half-time associate director of the VJAS.

Despite certain anger and frustration with the turn of events, the VAS recognized that the VAS and SMV might still participate in a mutually beneficial relationship. Hence, the VAS-Futures Committee proposed that the current part-time position of Office Secretary, currently held by Lisa Martin, be upgraded to full-time, and that this person hold office hours at the SMV from ten until three, maintain an up-to-date file of judges, and help in procuring judges. For their records, the committee also requested a copy of Maurakis's report of his VAS activities and a copy of all the VAS-related activities on his computer. Finally, the committee noted that the SMV Board of Trustees had approved an agreement that the VAS might rent space for a nominal fee, that having the VAS offices in the SMV would benefit the SMV for a variety of reasons, and requested 2000 square feet, including 1000 square feet by the end of the summer.<sup>79</sup>

On July 12, not long after receiving the Committee's letter, Witschey wrote to Carpenter:

Rae, I'll go to work on your space needs. Your request for 2000 square feet seems stunningly large for files, computer, program, storage, student papers, etc. Is this really what's required? At any rate, we are happy to have you continue here with us in the Broad Street Station. We too are delighted to celebrate the thirtieth anniversary of our cooperative efforts to further science education in the Commonwealth.<sup>80</sup>

The intent of the meeting with Witschey, his fax, and letter seemed somewhat confusing and insulting to Council. In frustration and anger, the issue of the Maurakis departure resurfaced and discussion focused on both the lost position and the problems with space. As Michael Bass queried, was not Gene Maurakis hired with the clear understanding that he had a half-time position for the Junior Academy? While it was obvious that Council as a group did hold that understanding, Gerald Taylor and Dean Decker both said that this half-time commitment "probably couldn't be proven, but that we could hope to successfully pursue previous assurances that available floor space would be provided as renovations continue." Although the requirements of

Maurakis's position might not have been fully clear, Carpenter and Cottingham said that the need for the space of 2000 square feet had been documented for at least the previous eighteen months.<sup>81</sup>

Not all of the November 5 meeting of Council focused on the rather disappointing and frustrating exchange that had taken place between the VAS and the SMV. For one, Council approved the creation of the "VJAS Research Endowment Fund," moving that:

\$3000 be [transferred from the General Fund held by the trust committee] to establish a new Academy fund — the VJAS Research Endowment Fund. Proceeds of this fund, upon recommendations of the Trust Committee and with the approval of Council, will be allocated annually to the VJAS Research Grants Program and to the increase of this fund's corpus.<sup>82</sup>

Don Cottingham announced officially that he would retire in 1997, but not before he stated that the regionalization of the Virginia Junior Academy of Science in the southwestern part of the state was progressing. Cottingham also pointed out that a regional director was needed. Indeed, all the groundwork for regionalization had taken place and the community colleges were in favor of the concept, but the lack of a director had halted the process. Cottingham remarked that he had met personally with each community college president as well as with their aides, and had reached the conclusion that overworked community college faculty would not be able to fill adequately the VJAS's needs on a regional basis. However, Cottingham reiterated his belief that once a director was located, regionalization would take place. It is important to note that, in 1998, the Academy named Cottingham a Fellow, in recognition of his unfailing and tireless dedication to the VAS and VJAS.

The issue of the VJAS and the question of its placement within the SMV or its splitting-up throughout the regions of the State were obviously difficult to resolve. One problem probably was that the Virginia Academy and the Science Museum were in an essential conflict because of their different needs. On the one hand, the VAS's major claim to vitality and perhaps even to its future existence was the continuing success of the VJAS. The Academy had created and nurtured the Junior Academy, had committed time, money, energy, and emotion to bringing the young people into the world of science. Why should the Academy relinquish all ownership over the VJAS to the SMV — an institu-

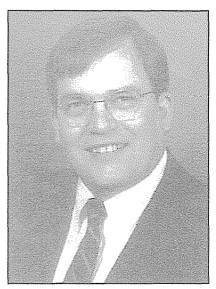
tion that owed its very existence to the VAS itself? Obviously, the VAS did not view Witschey's plan for the VJAS Committee to serve as a policy board as a viable alternative. As Elsa Falls remarked — and many in the VAS were in complete agreement with her:

The way we [VAS members] see it, the VAS is an autonomous organization who can do what Council sees fit. There would be a real fear that since the Science Museum is holding the purse strings, both the VAS and the VJAS would be auxiliaries of the Museum. Walter Witschey would call the shots, and there would probably be a power struggle on both sides . . . The VAS is just not ready to give up its baby for adoption. 84

Further, the "slippage" over the commitment of time that Maurakis was supposed to have made to the VJAS — a slippage exacerbated by the fact that the VAS had inadequate documentation for its expectations — certainly aroused negative feelings within Council regarding its relationship with the SMV. And probably the final negative reinforcement was Witschey's comment concerning the "stunningly large" amount of square footage the VAS expected to be provided.

That the Science Museum would want to be involved in or, as members of the VAS charged, "take over" the Junior Academy is understandable. What better way could there be to reach the youth of the Commonwealth than to sponsor the annual meeting of the VJAS? There at hand was a ready audience, whose presence on Museum premises would continue to justify the monies that the state had invested in the agency. Further, the SMV obviously understood that the Academy had a series of problems, which turning the Juniors over to the SMV would solve. For example, there was the issue of space, the central location of Richmond itself, and the on-going presence of a staff that could turn its attention to the VJAS. Furthermore, the Science Museum could assume that the VAS membership would continue to be able to give the SMV support in helping to run the program of the annual meeting. Yet in the end, two very different interpretations exist. According to the VAS, the question of the final positioning of the Junior Academy boiled down to one of ownership: each group, the VAS and the SMV, wanted control over the organization. For the Science Museum, the question centered around compromise: each organization would contribute to the VJAS in the manner in which they were best qualified.

Walter Witschey, director of the Science Museum of Virginia and adjunct faculty member at Virginia Commonwealth University, enthusiastically supports science education for all citizens of the Commonwealth. He values the historical ties between the Academy and the Museum and secured that partnership by providing offices in the museum complex in Richmond and supporting the development of the Virginia Science Resource Network.



Such conflicts are very difficult to bring to an equitable and satisfactory resolution. Although the part-time position has not been returned to the VAS, the relationship between the two organizations is on better ground. In 1998, for example, David Hagan of the Science Museum offered his assistance in writing grants for the Academy and in assisting members in finding sources of external funding. With recent renovations to the SMV, the Academy acquired, in October 2000, new office space — especially needed for the ever-expanding VJAS. Also, in partnership with the museum, the VAS sponsors the web-based Virginia Science Resource Network (VSRN), developed under the leadership of Gerald R. Taylor, Jr., Robert W. Fisher, and Patricia Fishback. As an electronic communication resource, VSRN enhances access to scientists across the Commonwealth. The public, and particularly middle- and secondary- school students, may use this gateway (http:// www.smv.org/VSRN/), eliminating geographical barriers, as they optimize their science education and acquire expert assistance. Further, the Academy has more firmly defined the role of the Executive Assistant, Lisa Martin, by both raising her salary and establishing set hours, which are acceptable to the Museum. Recognizing the magnitude of the responsibilities for the VJAS, the VAS appointed the first, paid director for the Junior Academy. Susan Booth, of Hampton, Virginia and

a teacher at Kecoughtan High School, accepted that leadership position in May of 2000. Finally, at the invitation of the Academy in 2001, Walter Witschey, director of SMV, presented the Negus Lecture, *Twenty-first Century Brains and the End of the Cutting Edge*, during the annual meeting of VAS. The reinvigorated relationship between the Academy and the Science Museum was further demonstrated as the Academy awarded Honorary Life Membership to Dr. Witschey, recognizing his leadership in science education for all citizens and his vision for the SMV.

# Reflections: 1990-2001

In sum, the years between 1990 and the turn of the century marked the gradual close of a period of transition for the Virginia Academy of Science and the beginning of a new phase of its institutional history. Following a rough period of membership decline and changing membership composition, the leadership of the Virginia Academy of Science realized that while its mission may not have changed, its audience had. Younger scientists, scientists from small liberal arts colleges, private schools, and community colleges, and graduate students comprised the bulk of the Academy, and programs and expectations needed to be adjusted accordingly by the leadership of the VAS.

# **Endnotes**

- <sup>1</sup>See, for example, Jaqueline L. Salmon and Sandra Sugawara, "Will Wilder, Business, Get Along?" *Washington Post* (January 12, 1990), p. B1. Also Mark Vogel, Debra Price, and Marilyn Thompson, "Boom or Bust," *Washington Post Magazine* (November 11, 1991), p. W21.
- <sup>2</sup> "Virginia Facing Shortfall of \$1.4 Billion in Revenue," *Washington Post* (August 2, 1990), p. A1.
- <sup>3</sup> SCHEV Report, "Colleges and Universities for the 21st Century: A Report and Proposals for Continued Improvement in Virginia Higher Education," July 10, 1991. This report was signed by the presidents of baccalaureate degree-granting institutions and the director of SCHEV. The report also stated that "If higher education's loss in general appropriation increases to 22 percent, Virginia would rank 43rd among the 50 states."
- <sup>4</sup> Frank B. Atkinson, *The Dynamic Dominion: Realignment and the Rise of Virginia's Republican Party Since 1945* (Fairfax, Virginia: George Mason University Press, 1992), p. 486.
- <sup>5</sup> "Governor Jim Gilmore's "Remarks on Announcing the Blue Ribbon Commission on Higher Education," June 30, 1998.

- <sup>6</sup>See Nancy Smith Midgette, *To Foster the Spirit of Professionalism* (Tuscaloosa: University of Alabama Press, 1991).
- <sup>7</sup> Elsa Falls to Charlotte Webb. Phone conversation, March 27, 1997.
- $^{\rm 8}\,{}^{\prime\prime}{\rm Minutes}$  of Council," November 4, 1990. Special Collections, Virginia Tech.
- "Minutes of Council," March 2, 1991. Special Collections, Virginia Tech.
- 10 "Minutes of Executive Committee," May 22, 1991. Special Collections, Virginia Tech.
- "Minutes of Council," November 17, 1991. Special Collections, Virginia Tech.
- <sup>12</sup> Elsa Falls to Charlotte Webb. Phone conversation, March 27, 1997.
- <sup>13</sup> Gerald Taylor to Charlotte Webb. Phone conversation, March 27, 1997.
- <sup>14</sup> "Minutes of Executive Committee," November 4, 1990. Special Collections, Virginia Tech.
- <sup>15</sup> Golde Holtzman to Charlotte Webb. Email, March 27, 1997.
- <sup>16</sup> James O'Brien to Mark Wittkofski, September 5, 1990. Special Collections, Virginia Tech.
- <sup>17</sup> Mark Wittkofski to Charlotte Webb. Phone conversation. March 24, 1997.
- <sup>18</sup> Mark Wittkofski to Charlotte Webb. Phone conversation. March 24, 1997.
- <sup>19</sup> Ironically, the Engineering Section, initiated by engineers at that institution, did not meet at the annual meeting in 1991 held at Virginia Tech, Blacksburg, Virginia.
- <sup>20</sup> "Minutes of Council," November 4, 1990. Special Collections, Virginia Tech.
- <sup>21</sup> James O'Brien to Don Zeigler, September 5, 1990. Special Collections, Virginia Tech.
- <sup>22</sup> James O'Brien to Charlotte Webb. Phone conversation, April 9, 1997.
- <sup>23</sup> "Minutes of Council," May 25, 1990. Special Collections, Virginia Tech.
- <sup>24</sup> Jim O'Brien to Hugo Seibel and Golde Holtzman, October 12, 1990. Special Collections, Virginia Tech.
- <sup>25</sup> "Minutes of Council," November 4, 1990. Special Collections, Virginia Tech.
- <sup>26</sup> "Minutes of Council," November 17, 1991. Special Collections, Virginia Tech. There is no evidence to suggest that these "special recipients" did or did not read the newsletter.
- <sup>27</sup> "Minutes of Council," November 5, 1996. Special Collections, Virginia Tech.
- <sup>28</sup> "Minutes of Council," November 5, 1995. *Virginia Journal of Science* 47, 1(1996), p. 59. The newsletter was not failing. Cook's remarks stemmed from the fact that the editorship was too time-consuming.
- <sup>29</sup> Rae Carpenter to Charlotte Webb. Conversation, Lexington, Virginia, May 11, 1997.
- <sup>30</sup> James O'Brien to Charlotte Webb. Phone conversation, April 9, 1997.
- <sup>31</sup> James O'Brien to Charlotte Webb. Phone conversation, April 9, 1997.
- 32 "Minutes," November 5, 1995. Special Collections, Virginia Tech.
- 33 Michael Bass to Charlotte Webb. Phone conversation, April 10, 1997.
- <sup>34</sup> "Minutes of Executive Committee," November 4, 1990. Special Collections, Virginia Tech.
- <sup>35</sup> Michael Bass to Charlotte Webb. Phone conversation, April 10, 1997. Also, James O'Brien to Charlotte Webb. Phone conversation, April 9, 1997. The committee became a standing committee in 1993.

- <sup>36</sup> "Minutes of Council," November 15, 1992. Special Collections, Virginia Tech.
- <sup>37</sup> Virginia Journal of Science 3(1990), pp. 157–228. It does not appear that publication of the Conference in any way affected the subscription rate of the VJS.
- 38 Virginia Journal of Science 4A(1990), pp. 257-461.
- <sup>39</sup> Virginia Journal of Science 2(1990), p. 126.
- <sup>40</sup> Stewart Ware, "Prestige and Impact vs. Usefulness in Biological Journals or Am I Just a Regional Kind of Guy," *Virginia Journal of Science* 1(1990), pp. 31-40. Also found in 1990, *ASB Bulletin* 37(1), pp. 22-28.
- <sup>41</sup> Stewart Ware to Charlotte Webb. Interview, Williamsburg, Virginia.
- <sup>42</sup> James O'Brien to Don Zeigler, September 5, 1990. Special Collections, Virginia Tech.
- <sup>43</sup> "Minutes of Council," March 2, 1991. Special Collections, Virginia Tech. Also, Richard Brandt to Elske D. Smith, January 21, 1991. Special Collections, Virginia Tech.
- 44 Harold Bell to Charlotte Webb. Phone conversation, April 16, 1997.
- <sup>45</sup> A chemist at VPI, Bell was Director of the Visiting Scientist Program from 1979 to 1982 and from 1985 to 1992. *Virginia Journal of Science* 3(1993), p. 309.
- <sup>46</sup> "Minutes of Council," November 15, 1992. Special Collections, Virginia Tech.
- <sup>47</sup> Jack Cranford to Charlotte Webb. Phone conversation, April 10, 1997.
- 48 Ibid.
- <sup>49</sup> Minutes of Academy Conference, May 25, 1995. Virginia Journal of Science 3(1995), p. 215. Beverly Orndorff, "College labs: Experiments without labs," Richmond Times-Dispatch, Section E (June 8, 1995).
- <sup>50</sup> "Minutes of Council," November 5, 1995. Virginia Journal of Science 1(1996), p. 53.
- <sup>51</sup> "Minutes of Executive Committee," November 5, 1995. *Virginia Journal of Science* 1(1996), p. 46.
- <sup>52</sup> James O'Brien to Charlotte Webb, Phone conversation, April 9, 1997.
- 53 James O'Brien to Charlotte Webb, Phone conversation, April 9, 1997.
- 54 "Minutes of Executive Committee," March 3, 1990. Special Collections, Virginia Tech.
- 55 "Minutes of Executive Committee," May 23, 1990. Special Collections, Virginia Tech.
- 56 Thid.
- <sup>57</sup> James Martin to Charlotte Webb, Interview, March 25, 1997. Richmond, Virginia; Dean Decker to Charlotte Webb, phone interview, March 26, 1997; and summary report from Lisa Martin, VAS office, July 2000.
- <sup>58</sup> "Minutes of Council," March 3, 1990. Special Collections, Virginia Tech.
- <sup>59</sup> This has somewhat changed from the regionalization discussed in Chapter Five.
- <sup>60</sup> "Minutes of Executive Committee," March 3, 1990. Special Collections, Virginia Tech.
- 61 Ibid.
- 62 "Minutes of Council," March 3, 1990. Special Collections, Virginia Tech.
- ∾ Ibid.
- <sup>64</sup> D. Rae Carpenter, Jr. to Paul H. Knappenberger, Jr., June 30, 1990. Special Collections, Virginia Tech.

- <sup>65</sup> Anthony F. Troy to Rae Carpenter, July 6, 1990. Special Collections, Virginia Tech. Also, Paul H. Knappenberger, Jr., July 11, 1990. Special Collections, Virginia Tech.
- "Minutes of Council," November 4, 1990. Special Collections, Virginia Tech. Conversations with Betty Blatt of the Science Museum of Virginia have revealed the fact that the Science Museum did not think of the position as so narrowly defined. Betty Blatt to Charlotte Webb. Phone conversation, April 18, 1997.
- <sup>67</sup> "Minutes of Council," November 17, 1991. Special Collections, Virginia Tech.
- <sup>68</sup> According to Carpenter, the term "Scientist in Residence" was never used by the SMV and, as chair of the Futures Committee, he never used it either. In addition, Carpenter stated that the term "Science Outreach" had negative connotations to some and that he specifically requested such use be discontinued. Rae Carpenter to Charlotte Webb. Interview, Lexington, Virginia, May 11, 1997.
- <sup>69</sup> "Minutes of Council," November 17, 1991. Special Collections, Virginia Tech. Again, conversations with Betty Blatt of the Science Museum support this discrepancy in documents. The Science Museum did not and does not to this day consider the title "Scientist in Residence" as part of the job title. Betty Blatt to Charlotte Webb. Phone conversation, April 18, 1997.
- <sup>70</sup> "Minutes of Council," November 17, 1991. Special Collections, Virginia Tech.
- 71 "Minutes of Council," March 7, 1992. Special Collection, Virginia Tech.
- 72 Ibid.
- 73 Ibid.
- <sup>74</sup> Virginia Journal of Science 2(1991), p. 268.
- <sup>75</sup> Eugene Maurakis to Charlotte Webb. Phone conversation. December 11, 1996.
- The Ad Hoc Committee to Review the Position of the VJAS Associate Director consisted of Chair Rae Carpenter, Don Cottingham, Elsa Falls, Vera Remsburg, Tom Sitz, and Gerald Taylor.
- <sup>77</sup> "Minutes of Council," November 5, 1995. *Virginia Journal of Science* 1(1996), p. 50.
- <sup>78</sup> Ibid., pp. 50-51.
- <sup>79</sup> Ibid. The letter to Walter Witschey dated June 26, 1995, is not in the Archives.
- <sup>80</sup> Ibid., pp. 50-51.
- <sup>81</sup> Ibid., p. 51.
- 82 Ibid., p. 54.
- 83 Ibid., pp. 55-56.
- 84 Elsa Falls to Charlotte Webb. Phone conversation, March 27, 1997.