A few years ago while touring the Ghent University Botanical Garden in Belgium, I wandered into the Conservatory. I was impressed by some of the ongoing renovations, which included a rugged natural landscape in the succulent house. An entire greenhouse was dedicated to the world’s largest water lily, *Victoria amazonica*, which has pads so big they can support the weight of a child. I entered the densely planted Palm House. Something about the Palm House was special and after a few minutes I noticed subtle sounds of the tropical rain forest. Had I been a child, I would have looked up to find the bird that made the brilliant call or tried to flush out that chirping cricket from the underbrush. I realized, however, that I was listening to a soundtrack, one so realistic it made me feel like I was trekking through a rain forest. While I like being considered someone with original ideas, this soundtrack idea was too good not to steal. I began an Internet search for soundtracks of tropical rain forests.

Some web pages had samples that I could hear on my computer speakers. There were also pages that reviewed the soundtracks. People gave their opinions on how relaxing the sounds were or if you were likely to be disturbed because you thought a tiger was in your room. Needless to say, I was searching for authentic sounds of a tropical rainforest and after much looking finally decided on two that are not mixed with any special effects. I chose *Echoes of Nature - Jungle Talk* by Laserlight Digital and *Relax with Tropical Rain Forest* by Creative Music Marketing, Ltd.

We purchased a rather inexpensive stereo system that has a repeat CD function, and yards of speaker wire that run into the Palm House. The system and labor to install it were funded by Friends donations.

At the end of December the installation was complete and we turned up the volume. Suddenly the Palm House was transformed into a rain forest where sounds of crickets, birds, and the occasional (thank goodness) howler monkey echo through the plants. The sounds are subtle enough not to disturb someone reading plant labels, but evident enough to add another dimension to what many children call “the jungle room.” We can turn off the soundtrack whenever we don’t want to hear *Jungle Talk*. Beethoven anyone?

Early reviews from visitors have been great, even if there is one unexpected side effect. We have noticed an unusually large number of visitors lingering on the wooden bench in the Palm House. Feeling close to nature can be a wonderful thing. Come enjoy the sounds.
Introducing Sheri Lyn Peabody

When you call the Botanic Garden office or stop by the Lyman Plant House, you’ll hear a new voice and see a new smiling face in the office. Sheri Lyn Peabody joined the staff on October 13, 2003. When Maryjane Beach, her predecessor, announced last year that she would retire after 25 years as Administrative Assistant, we all went into shock and worried about finding a suitable replacement. However, we worried needlessly.

Sheri comes to the Botanic Garden with much Smith College experience, as a student (class of 1987), and as an employee for the past ten years, in the Class Dean’s office and most recently for the Ada Comstock Scholars Program. Both Maryjane and Diane Bowman gave Sheri a thorough orientation to all the workings of the office. Sheri has quickly learned our office systems and seems to have worked herself into our operations quite seamlessly. Sheri has an easygoing nature and positive attitude. Director Michael Marcotrigiano says, “She brings to the Botanic Garden a friendly, cheery attitude, along with the technical skills to manage a complex and busy office.” Sheri has indeed been very busy, and we have hardly had a chance to miss Maryjane too much as she is now back as a volunteer!

Sheri has always thought it would be interesting to work at the Botanic Garden, but no one ever seemed to leave. When Sheri was a student, she spent many afternoons reading in the garden or relaxing on the banks of the pond. She considers herself lucky to have been looking for a job when this position finally opened up. When the job was announced on campus many people encouraged her to apply to work in such a beautiful place. Now, when Sheri walks around campus, people stop her and say, somewhat enviously, “What a great place to work!” Sheri is very happy to be in an office that offers a window view of Paradise Pond as well as a door that leads her to where she is surrounded by orchids and bananas.

On your next visit, be sure to stop by the office and say hi to Sheri. She’s looking forward to matching the names on the Friends membership forms with your faces. If you can’t get here immediately, history tells us you have time. Sheri is unlikely to pack up her bags anytime soon.

Madelaine Zadik

Drawing of Phalaenopsis sp. by Gwendolyn Rayner ’06 in the Stove House, spring 2003
A Bittersweet Farewell

As I sit at my desk thinking about what to write regarding my years here at the Smith College Botanic Garden, I suddenly realize that my time to leave is fast approaching and the reality of it is starting to sink in. I will be leaving a place I have called home for the last twenty-five years, a place where I have made many friends. I will miss working with them. I have worked under four directors and three interim directors, each with their own management style and vision for the campus. I have had many a worker come into the department thinking what a nice job this must be and then leave at the first opportunity, after realizing they actually had to work! It has been a challenge at times but one that has been well worth it.

I started at Smith as a laborer in the Lyman Plant House in November of 1978 when Greg Armstrong was director. I was only in this position until July of 1979, when I was “bumped” by someone with more seniority, due to a reorganization of the custodians, something that seems to happen frequently. I ended up working as a night shift custodian for a brief period, which fortunately only lasted until early winter. The Gardener No. 1 position became vacant and I was awarded the job. I stayed in that position for about seven years before becoming the first “Groundskeeper” in the Physical Plant, remaining there for four years until being promoted to my final position as Outside Supervisor in the Botanic Garden.

Shortly after starting at the Botanic Garden, I became aware that my great-grandfather, Frank Barnard, had worked at the Lyman Plant House under William I.P. Campbell. He had emigrated from England, settling first in Cromwell, Connecticut, later moving to Northampton to work at Smith College. He lived in a house located just below the present Admissions building on College Lane. My grandfather, Allen Barnard, told me how teams of horses were used to scrape the ice on Paradise Pond to make an ice skating rink for the students.

As you might expect, I have seen many changes over the years. The Botanic Garden has had its share of growing pains, and it has been a constant battle to protect the specimen trees that are part of the Arboretum collection (see story on page 6). Countless hours were spent working with the Physical Plant staff and contractors to find ways to work around trees and keep them from falling prey to chain saws and chippers (all in the interest of progress). It takes many years of growth to get the beautiful specimens that now grace the campus, but only a few minutes to destroy a tree. With careful planning this can be avoided, providing trees for all to enjoy for many years to come. I am proud to say that we were successful in saving many trees owing to the hard work of the Botanic Garden staff, all of whom are passionate about their work and believe in what they are doing!

Record keeping has improved dramatically during my tenure, with all the plants now being recorded in a computerized database, eliminating much of the paperwork that was needed to keep track of moves, plant locations, and other pertinent information. Gone are the days when plant relocations were noted on a log and then transferred onto the corresponding index card during the winter. Today, any information can be changed with a few strokes of the keyboard. Some of the larger trees now also have global positioning system (GPS) coordinates on file! What a difference technology has made in what seems a short period of time.

I have seen other changes in the equipment we use, making jobs easier on the employees’ backs and saving time, something that we really needed with the cutbacks. At one time, there were ten employees doing what seven currently are asked to do, a monumental task to say the least. Thanks to the Friends of the Botanic Garden, a trailer-mounted tree spade was purchased enabling us to move larger trees from our nursery onto campus, giving more of an instant effect. Other pieces of equipment acquired have been our own department tractor with bucket and set of forks used for many purposes, power pruner, gas-operated hedge trimmer, and small utility vehicles, all very useful and versatile. I have seen the days of the scuffle hoe just about disappear and now weeds are kept in check using landscape fabric and mulch, some of which comes from the chips generated from campus prunings and removals, and the rest from purchasing upwards of four trailer loads each spring.

Perhaps one of the most beneficial changes I have seen is that the Botanic Garden has taken over the landscaping at the completion of building projects, such as the new Campus Center (see page 12). This allows us to control which plants are selected, enabling us to add new species to the collection as much as possible. It also ensures that the installation is done correctly. (On more than one occasion in the past, we have had to redo plantings done by outside contractors.) The work was performed by our staff on overtime and has still come in under budget.

I am truly going to miss the Botanic Garden, and most of all the people, from the director to the laborers, who are the backbone of the department. I have enjoyed our time together and feel that much has been accomplished in helping to make the campus inviting for all to enjoy. It was a battle at times but well worth it, and I am sure that with such a wonderful staff the Botanic Garden will continue to provide educational value as well as beauty for all to treasure for many years to come. I will be one of those lucky visitors now.
This fall I was privileged to make the acquaintance of many faces from Smith’s past. Three months ago, I never would have believed that I could become so intimate with a few dozen yearbook portraits and chrysanthemum photographs. But after two months working on the Fall 2003 exhibit, *Smith Chrysanthemums: Hybrid Alums*, these images of alumnae and their mum hybrids have become indelible in my mind. During the months of September and October, they were as familiar to me as the people I passed on my way to class every day.

When I was granted the position of exhibit intern at the Lyman Plant House, I was ecstatic to have the chance to be involved with the Botanic Garden. The gardens and the Conservatory were part of the reason I fell in love with Smith as a prospective student, and they remain my favorite aspect of the campus. The opportunity to work on exhibits for the Church Exhibition Gallery in the newly renovated Plant House was doubly appealing. But I was most thrilled to learn the theme of my first project: a celebration of student chrysanthemum breeders and the history of the Chrysanthemum Show at Smith College.

My first role as intern was to scour the College Archives for information and photographs from past Chrysanthemum Shows. This detective work was as fascinating as it was fun. I had no idea the Mum Show was so old! It is in fact a long-standing Smith tradition that has occurred every November (except during renovation years) for nearly one hundred years. Student newspapers from as early as 1910 advertise chrysanthemum shows displayed at the Lyman Plant House by members of the horticulture class.

Archival work can be overwhelming, as it is necessary to sort through a large volume of material to find pertinent information, but the process and the results are extremely rewarding. I was allowed some captivating glimpses into the history of Smith and was given a taste of a campus atmosphere dramatically different than the one I know today. Thanks to the Smith College Archives, and in particular to Susan Barker, Susan Boone, and College Archivist Nanci Young, I discovered many beautiful old photographs and interesting newspaper articles.

Much of the archival work on the exhibit had already been accomplished when I began the project. Erika Nelson ’03 devoted last spring to matching chrysanthemum hybrids with their alumnae breeders. Erika was able to put a face to a mum, and her work forms the heart of this exhibit. Student chrysanthemum hybrids, preserved for generations in the greenhouse collection, were identified whenever possible with their hybridizers. A photo of each mum was paired with the yearbook photo of its student creator, with the oldest pair dating from 1920.

In addition to research, my work on the exhibit involved writing informational panels about the history of the Mum Show, as well as the botanic history of the chrysanthemum, its flower forms, and techniques for mum hybridization. As I had never before worked on a display of this scale, it was also a crash course in mounting photos and designing an exhibit layout.

I have found this a gratifying experience well beyond the acquisition of new skills. It was wonderful to watch and guide the development of a project I had seen in its very beginning, drawing and benefiting from the numerous resources at Smith College to enliven and enhance this exposition. I have come to fully appreciate the gift we have in the College Archives and the Mortimer Rare Book Room, as well as the rich history of Smith and Botanic Garden traditions. The Chrysanthemum Show has more meaning to me. I was lucky enough to participate in the first mum-breeding lab held by the horticulture class since the Conservatory renovations, and I could not help thinking of all the faces and hands preceding me in the previous century.
Father Knows Best?

Letitia Roberts’ hybrid chrysanthemum that she created while taking Horticulture with Bill Campbell

Dear Ms. Zadik,

Your letter of October 21st with its nostalgic opening line: “Do you remember hybridizing chrysanthemums when you took Horticulture at Smith?” brought back a flood of happy memories, and I had intended to write you at that moment to let you know how entranced and amused I was to hear about your “Chrysanthemum Hall of Fame” (or in my case, perhaps “Hall of Shame,” as for no remembered reason, instead of attempting a lovely powder-puff of a blossom, I opted for the simple daisy type, inducing yawns from my more imaginative classmates). As so often happens, however, I was distracted from my best intentions, and it wasn’t until I received your second letter this week that I found time to sit down and express my felicitations on your extraordinary project. How I wish I could visit the Lyman Plant House while the exhibition is on, but a trip to Northampton is not possible this autumn, so the best I can do is take the online tour, which, with my astounding dearth of computer skills, will be a considerable challenge, but one I’m sure will prove worth the effort!

You might be amused to know that during the summer before my freshman year at Smith, while I was making those profound choices of what courses to take, my father, in his usual “no arguments” way announced, “Tish, there are two courses I want you to take at college.” I groaned silently, fearing that he would say something like “physics and economics,” in which I had already displayed a colossal inaptitude, but dutifully inquired, “What might they be?” And much to my astonishment he replied, “Public speaking and horticulture.” All of my life my parents were pillars of the community, finding themselves being asked to speak at meetings and other assemblages for one cause or another; and they equally were avid horticulturists, my Smith ’39 mother having won numerous awards from the Garden Club of America, which in her humility she never discussed. But as an executive, Dad, in particular, understood the importance of being able to communicate easily and speak articulately in public, and they both knew the joy of working with flowers, plants and trees. I was so lucky to grow up amidst glorious gardens, all created by and cared for by my parents, with the occasional incompetent hand from us children. Dad’s advice in this instance was the best he ever gave me, and as it turns out, Horticulture with the delicious Mr. Campbell was the best and most favorite of all the courses I took during my four years at Smith. I am embarrassed to admit that I didn’t take Public Speaking because at the time it was renowned for being a rather pathetic product of the Theater Department, in which the students read nursery rhymes aloud. Although I don’t regret having missed the nursery rhyme sessions, I acknowledge that my father’s instructions were sound, as much of my career has involved lecturing and teaching, and a good course in public speaking would have been a useful path through the initial palpable stage fright. But Horticulture provided that essential combination of academic knowledge and practical experience that bonded all of us in the class to the soil, the sun, the rain, and indeed to each other, as we enthusiastically cheered the progress of our classmates’ cherished and lovingly tended plants. At a rather self-centered time in our lives, Horticulture taught us the importance of caring for things that depended on us to survive—to grow and thrive, and it taught us how much better the world is for the plants around us. I can’t tell you how thrilled I am to be a “Hybrid Alum,” and while using a photograph of both my weedy mum and this equally weedy alum won’t add much distinction to your website, I consider it a great honor to be a tiny part of the project, and I wish you every success!

With thanks for both of your letters, and with best wishes for your continued good work in the wonderful Lyman Plant House and Botanic Garden.

Yours sincerely,

Letitia Roberts ’64

Although the exhibit, Smith Chrysanthemums: Hybrid Alums, is no longer on view in the Church Exhibition Gallery it is online at: http://www.smith.edu/garden/exhibits/alummumexhibit/mumalumsmain.html
While some of you may have thought that space constraints led the Botanic Garden to look upward for new planting sites, this quaking aspen (*Populus tremuloides*) seeded itself into the chimney of Tyler House. This is a perfect lesson on how these very light and tufted seeds are aerodynamically outfitted for efficient wind dispersal. With heavy winds they can travel for several miles! This species must be doing something right as it is the most widely distributed tree in North America, occurring throughout much of the continent all the way from Newfoundland west to Alaska, and south to northern Mexico.

Since the quaking aspen is quite intolerant of shady conditions, it chose a good site for itself in the chimney—there was certainly no obstruction of sunlight. However, since its roots were penetrating the mortar, the tree had to go. There had been one unsuccessful attempt last year to remove the tree using the Northampton Fire Department’s ladder, but the ladder could not be positioned in a way that would have allowed someone to reach the top of the chimney safely. Fortunately, using a high-lift rented by the Physical Plant, John Berryhill, Arboretum Assistant, and Tom Gingras, our heavy equipment operator, were able to get up there and remove the tree in time for winter enjoyment of the fireplace.

Anyone who walked or drove past Tyler House on the Smith campus in December of last year might have been shocked and concerned to see a large crater adjacent to the Turkish filbert (*Corylus colurna*) in our collection. A break in a sewer line running parallel to Green Street required immediate attention. After further digging and investigating, it was determined that the only suitable solution was to create new lines under Tyler lawn and out of Tyler Annex basement. This was a terrifying thought. If traditional trenching techniques were used to lay the new pipe, the root systems of several old and valuable members of our arboretum could be severely harmed. Our largest red oak (*Quercus rubra*), our largest shagbark hickory (*Carya ovata*), a towering tulip tree (*Liriodendron tulipifera*), one of our larger dawn redwoods (*Metasequoia glyptostroboides*), and a lovely horse chestnut (*Aesculus hippocastanum*) all surround Tyler Annex. Fortunately, new technology is going to bail us out of what could have been a tragic situation. A large drilling machine will be able to bore an eight inch wide hole horizontally from the north end of College Lane to the lawn in front of Tyler and to Tyler Annex basement. Plastic pipe will then be pulled through. Since the drilling will never come within eight feet of the surface, even the largest trees in the area should never know it happened, as the majority of their roots are well above this depth.

Sadly there was a trade-off to make all of this work. One American elm and two white birches growing near the dam on the Mill River had to be removed to accommodate the drilling equipment. This is an easier pill to swallow, given that future maintenance on the dam would have required their removal anyway.

The project should be completed by the end of January. In the meantime, if you see heavy equipment and digging in the area, rest assured that the neighboring trees should get through it unharmed.
The Landscape Studies program, the Botanic Garden, and Mortimer Rare Book Room proudly announce the recent purchase of Observations on the Theory and Practice of Landscape Gardening (London, 1803) by Humphry Repton (1752-1818). This jewel represents several significant shifts in the history of landscape architecture and will therefore be an invaluable teaching tool, especially for landscape studies courses.

Repton chronicled Lancelot “Capability” Brown’s principles of design, much as Dezallier d’Argenville did for André Le Nôtre, enabling contemporaries and historians to envision the career of England’s most important, albeit unpublished, landscape designer. Now that both Repton’s and Dezallier’s books are in Smith’s rare book collection, students will be able to compare and contrast Brown and Le Notre, English and French styles respectively. Although Repton began as a Brown disciple, he quickly carved his own niche in society, promoting good taste and good sense, and developing a style coined “ornamental picturesque.” Early in Observations he claims, “I wish to make my appeal less to the eye, than to the understanding,” encouraging proprietors of country estates to expand their vision beyond the contemporary fashion for a pictorial style of design to a more panoramic effect. Forty plates will instruct students as to the methods and means of achieving this once novel approach.

Repton includes excerpts from his more famous Red Books, which were his “calling card.” Through descriptive text and aquatints of existing and proposed views, all bound together in red leather, he would convince landowners that their estates were in need of his assistance. “Humphry Repton may have been the very first makeover genius. His before and after landscape illustrations seduced estate owners into reenvisioning their property” writes Ann Leone, Director of Landscape Studies and Professor of French. As many of these Red Books are lost or remain in family hands, the fourteen moveable overslips in Observations provide a unique opportunity to view actual and then proposed landscapes.

Finally, this work reveals a burgeoning interest in democratic design. Repton campaigned for the inherent beauty of the English vernacular landscape and expanded his audience to accommodate the needs, and even the tastes, of the commoner. His efforts paved the way for future arbiters of middle class taste and consumption, like A. J. Downing (several of whose books are in Smith’s collection), as well as for pioneers of public park design, like Joseph Paxton, W. A. Nesfield, and Frederick Law Olmsted. Moreover, his increasingly architectural style inspired the next generation to adopt the grander title landscape architect.

Repton’s Observations had long been sought after by Martin Antonetti, curator of the Mortimer Rare Book Room, who proclaims, “Copies on the antiquarian book market are scarce, but swift and purposeful cross-disciplinary collaboration ensued, and the quarry was ours.” Such is the stuff of multi-disciplinary programs like Landscape Studies. One of the many reasons why Smith College is host to the first landscape studies program at a liberal arts college in this country is because of its rich resources, such as the Museum of Art, the Botanic Garden, and the Mortimer Rare Book Room. And now finally Repton’s most personal vision shall come to pass, at least here at Smith: “It is rather upon my opinions in writing . . . that I wish my Fame to be established.”
Sophie Satin and Genetics at Smith College

Sophie Satin served as leader, mentor, and friend to the students at the Smith College Genetics Experiment Station. When we were students she was close to 70 years old, but she set an example to us all with her vigor, energy, and determination. She walked briskly several times a day to the experimental greenhouse at Fort Hill and spent most of her days and weekends in the Burton Hall laboratory. Severe in her dress, she had straight, steel gray hair, steel framed eyeglasses, and Slavic features, all of which were in contrast to her kind smile and lively sense of humor. A pleasant and gentle leader who nonetheless demanded precision in our work, she encouraged us in our studies, took us to lectures and concerts, and shared simple meals in the laboratory.

Her modest and unassuming appearance also concealed an early life of privilege in Russia where she was born in 1879, daughter of a wealthy landowner, Alexander Rachmaninoff Satin. She spent her childhood at the family’s country estate, Ivanovka, which was about 250 miles southeast of Moscow. She and her sister and two brothers were tutored by visiting university students and a French governess until she was 10 years old. At that time the family began spending part of the year in Moscow so that the children could attend school. A cousin, Sergi Rachmaninoff, who was a student at the Moscow Conservatory of Music, came to live with the family during these years. He became part of the family and returned with them to Ivanovka in the summer. He later married Sophie’s sister who was also a musician.

When Sophie Satin completed secondary school there was no opportunity for her to continue. Education of women in pre-revolutionary Russia was very limited. She heard about a course in stenography at her old school but she didn’t know what stenography entailed. Nevertheless, on her mother’s advice, she enrolled, and completed the course. There were few individuals who had this training in Moscow and she was much in demand. Her work allowed her to earn money and to travel in Moscow and to other cities as she recorded meetings, political speeches, lectures and conferences, even talks by horse breeders and nobility. She was sent to Paris by the Russian government to record an investigation of an incident that had occurred in the Russian-Japanese War in 1904.

She maintained her interest in science. She and her friends went on frequent field trips to the outskirts of Moscow, collecting both plant and animal specimens. They identified their specimens and learned how to preserve them for use as demonstrations of plant and animal life processes. Their collections grew and eventually became a natural history museum, The Museum of Visual Arts, which they organized and opened to the public. There was a great need for good visual aid material for classrooms and they began providing this at a small fee. Later, during the Russian Revolution, the collections were sold for a million rubles, providing them with much-needed funds for food and necessities.

Several years after finishing secondary school she enrolled in a series of free lectures offered by the Society of Women Tutors and Teachers. The flexibility of her stenographer’s work schedule permitted Sophie Satin to continue her education. The lectures, including history, art, literature, botany, zoology, bacteriology, and embryology, were in the evenings with laboratories during the day. Sophie Satin attended them in fall, winter, and spring for several years. When the government authorized the opening of Moscow Women’s College, she completed work for her degree in botany in 1904. These degrees for women were not awarded until 1913 when she received hers after passing an examination for certification in botany and a research paper in mycology. Through friends she obtained space to continue mycology research in the Botanical Laboratories of Moscow University, where she became an instructor in botany at Moscow Women’s College in 1907, and later an assistant professor, until she left Moscow in 1921.

Her last four years in Moscow were difficult due to political upheaval during the Russian Revolution. They were years of deprivation, malnutrition, and lack of medical care as well as basic necessities such

(Continued on page 9)
as coal, soap, and water. There were threats of eviction and imprisonment. Seeking food for herself and her parents, and carrying water to the unheated apartment, required time and patience. She had to put aside her research in order to survive, but she determinedly continued teaching students and keeping her fungal cultures alive. To feed their families, the staff of the botanical laboratory ploughed the lawn of the institute and planted vegetables. The group, including Sophie Satin, had to guard the plants from hungry thieves both day and night.

Of the family, only Sophie Satin and her parents remained in Moscow; her sister and brother and their children had already left Russia. In 1921 she applied for visas to Riga, Latvia. Her parents claimed poor health as a reason to leave and she used her need to study and work in a laboratory. She was required to identify the scientist with whom she was planning to work. Scanning her memory she recalled Albert Blakeslee’s work on the sexuality of bread molds and used his name. Seven months later they received visas to leave Russia. Her sister and brother-in-law, Sergei Rachmaninoff, now a well-known pianist and composer, were living in New Jersey and they invited Sophie Satin to come to the United States where there was a greater possibility for a woman to work in science.

Being close to New York there was now the opportunity to meet the man whose name she had used to obtain the visa. She visited Albert Blakeslee at the Carnegie Station for Experimental Evolution in Cold Spring Harbor. Although he was no longer doing research on molds and had transferred his interest to Datura (jimsonweed), he offered her a research fellowship to conduct independent research on his collection of molds. She served in this capacity from 1922 to 1923. After a summer at the Department of Agriculture she returned to Blakeslee in the fall of 1923. Thus began an association that lasted more than thirty years. As the pace of study of Datura increased, Blakeslee asked Miss Satin if she would help with the cytogenetics, which Sophie Satin learned under the tutelage of Dr. Elizabeth Bergner. When Dr. Blakeslee transferred the Datura research to Smith College and Dr. Bergner decided to stay at Cold Spring Harbor, Miss Satin accompanied Dr. Blakeslee to Smith and assumed responsibility for Datura cytogenetics. She dropped her work with molds, and the mold collection was donated to Harvard University.

During the thirteen years at Smith College, much of the research of Blakeslee’s group focused on how to overcome barriers to crossability among the species of the genus Datura. Interspecific crosses might result in normal development, abnormal growth of pollen tubes, empty pollen grains, aborted embryos, or sometimes tumorlike growths in the ovule. The researchers developed methods to facilitate pollen tube growth by splicing styles and to grow the embryos in plant tissue culture. The ultimate goal of the interspecific crosses was to use the hybrids for cytogenetic analysis of meiotic pairing of the chromosomes. This would provide information about the degree of genetic homology among the species.

Miss Satin carried out studies of normal development of pollen tubes and embryos in parallel to the experiments with interspecific crosses. During this period, the induction of mutations in Datura stramonium by aging seeds or by exposure to various types of irradiation was also investigated.

For many years Blakeslee had been experimenting with Rudbeckia, a group of plants that includes the black-eyed Susan. He selected interesting variants of the native plants and doubled the chromosomes with colchicine to obtain larger and more deeply colored flowers. He continued selection for form and vigor among seedlings from seeds produced by insect pollination and developed attractive horticultural strains of Rudbeckia.

The Smith College Genetics Experiment Station was very productive over the thirteen years. There were 62 publications on Datura projects alone. Miss Satin was coauthor of most of these papers. She supervised eighteen students. There were five doctorates and nine master’s degrees awarded for work on Datura. One student received her master’s degree for her work on Rudbeckia.
In 1944 Smith College awarded Sophie Satin an honorary doctorate degree. After Dr. Blakeslee’s death in 1954, the three associates, Amos Avery, Jacob Rietsema, and Sophie Satin, were invited to publish a book about Dr. Blakeslee and the Datura research. Miss Satin moved to New York to live with her niece and continued working on this book until its publication in 1959—Blakeslee: The Genus Datura, by Amos G. Avery, Sophie Satin, and Jacob Rietsema, New York: The Ronald Press, 1959. Sophie Satin also published articles on mycology (Basidiomycetes and Ascomycetes) in Russian, German, and French beginning in 1910. She published the methodology for preservation of plant and animal specimens and how to develop local museums for high schools.

When her brother-in-law, Sergi Rachmaninoff, died in 1943 Sophie Satin had collected and organized his letters and archives and deposited them in the Library of Congress. Recollections About Sergi Rachmaninoff, a book she wrote about his life, was published in Russian in 1946. She also collaborated with the authors of another book on the life of Rachmaninoff—Sergi Rachmaninoff: A Life in Music by S.L. Bertensson and J. Leyda, New York University Press, 1956.

After her retirement she wrote The Education of Women in Pre-Revolutionary Russia, which was published both in Russian and English. At the request of her friends at Smith College she wrote the story of her life, Recollections by Sophie Satin (translated from the Russian). These recollections, although never published, were reproduced and distributed to her friends at the time of her death. This brief abstract of a long and eventful life is taken from those recollections.

Miss Satin died in 1975 at 96 years of age. Those were ninety-six years well spent by a woman who was well respected in science by colleagues, friends, and students, and in the world of music for her contributions regarding the life of Rachmaninoff. At the end of her recollections she expresses her gratitude to America and to her American friends who helped her for fifty years “to live, work and understand this remarkable country, America.” Those of us who had the opportunity to work with her and to know her as a friend and teacher must thank her for her inspiration, understanding, and direction during her years at Smith College.

### Epilogue

Hope Handler Punnett (Smith A.B. 1948) and Catherine Gardella Palmer (Smith A.M. 1949) both went on to become cytogeneticists, after having studied with Sophie Satin at the Smith College Genetics Experiment Station. Miss Satin taught them laboratory methods: how to make crosses, to dissect pollen tubes, to assess the viability of pollen grains, to dissect the hybrid embryos and grow them in sterile tissue culture media, and eventually graft them onto harder mature parents. They learned to make cell squashes for meiotic studies and how to interpret the chromosome configurations. The techniques and knowledge gained at the Smith College Genetics Experiment Station were useful in later years when they began to study human chromosomes. Plant tissue culture was an introduction to growing cells in cultures, which was used to obtain dividing mitotic cells in human cell cultures. Hope Punnett and Catherine Palmer state, “Many of the bits and pieces of genetic knowledge imprinted in our minds at the Smith College Genetics Experiment Station were later retrieved and used in human cytogenetics. It was as if Sophie Satin and Albert Blakeslee were with us guiding us still.”

### Students who worked at the Smith College Genetics Experiment Station

- B. Blondel
- M. Patricia Brugge (Beck), A.M. 1951
- Gwen Carson (Becker), A.M. 1946
- Kathleen Cole, Ph.D. 1952
- Jean M. Cummings, Ph.D. 1947
- S. Leonard Doerpinghaus, A.M. 1948
- Catherine Gardella (Palmer), A.M. 1949
- Prakash. C. Joshi, Ph.D. 1949
- Hope Handler (Punnett), A.B. 1948
- Eva Kuhn (Hilfer), Ph.D. 1955
- Martha Leavenworth, A.M.
- Susanne McLean (Owen), A.M. 1944
- Patricia Poindexter (Pittman)
- Marie Helene Sachet
- Carmen Sanz (Briso-Montiano), A.M. 1946
- Mary E. Sanders, Ph.D.1947
- Marilyn Sawyer, A.M. 1950
- Babette Solomon (Radner), A.B. 1945, A.M. 1949
- Mary Alton, A.M., the only student to work on Rudbeckia

The authors thank Smith College Archives for help with the list of individuals receiving degrees from the Smith College Genetics Experiment Station, the Northampton Historical Society for DHinformation about Fort Hill, Babette Solomon Radner (Smith A.B. 1945, A.M. 1949), and Mary Emison (Smith Ph.D. 1969) for providing a copy of a paper she had done on Blakeslee while at Smith, Miss Satin’s recollections, and the Datura book by Avery et al.

### The Legacy Continues

As a part of his research program, the current Botanic Garden Director, Michael Marcotrigiano, studies the relationship between the shoot tip (meristem) in plants and the cell layers that develop in organs such as leaves. Interestingly, it was the seminal papers of Albert Blakeslee and Sophie Satin published in the American Journal of Botany that laid the foundation for his work. What goes around comes around.
Buying Rare Plants on the Internet

Avid gardeners and greenhouse owners are always on the lookout for rare and unusual plants. By rare, I mean hard to find, not something on the endangered species list that is illegal to collect or sell. Sometimes when you see a plant in a book or a garden you are visiting, you know that you must have it. In years gone by, the most reliable way to find such plants was to look for advertisements and then send for price lists and catalogs or drive for miles to a rare plant nursery. Small numbers of plants were available through small specialty growers and hobbyists, who would send you a typed list (fancy catalogs complete with images were too expensive to produce and distribute). With the advent of the internet, the playing field is being leveled. Small growers can compete with large companies since they can either put up an image-filled web page or list plants with images on auction sites like eBay. In addition, once you acquire some desirable species and cultivars, there are numerous Internet chat groups where trading rare plants is encouraged. At this point, I guess I should make the standard disclaimer. If I mention a web page or business it is my opinion and my view does not necessarily represent the view of Smith College.

There are several methods for obtaining rare and unusual plants online. One use a search engine (I like www.google.com). You will probably come up with too many sources, most of which will not sell the plant unless you buy a minimum amount and some that are overseas and unable to ship to the United States. Often, it is better to look for small ads in garden magazines that direct you to the web pages of specialty growers. Here you will find many specialists that are mostly mailorder companies. Some of my favorites are www.bobsmoleys.com for cacti and succulents, www.variegatedfoliage.com for variegated hardy plants, www.collectorsnursery.com, www.heronswood.com and www.agardens.com for unusual woody landscape plants, www.newengbambono.com for hardy and tropical bamboo, www.robsviolet.com for unusual African violets and gesneriads, and www.glasshouseworks.com for greenhouse tropicals.

Another method for obtaining rare plants is to join chat groups on the Internet. The best ones can be found on www.yahooligans.com. Here you can “talk” to fellow enthusiasts and either find out a source for a plant by asking a list member or buy or trade with them privately.

If you like to have sweaty palms while you buy plants, there are also plant auctions on auction sites, the most extensive and famous being eBay.com. I’ll be the first to admit eBay is not a place I would have thought of to buy rare and unusual plants. Yet, one day I decided to search their web pages for a dwarf lady palm cultivar from Japan, *Rhapis excelsa* ‘Kodaruma,’ and I couldn’t believe my eyes. There was a small division of this palm being offered. However, since eBay is so big, searching their pages can be a nightmare. If you wander aimlessly you are likely to find something you don’t need at a price you can’t resist. If you are interested in a particular plant the best thing to do is to go to www.ebay.com and then look for the “Home” section along the left margin on their front page. Under it you will find a “Lawn and Garden” link, where you’ll find many garden-related products. There is one for “Plants, Seeds, Bulbs;” where you can search based on any plant trait or common or botanical name, e.g., “variegated” or “pine” or “maple” or “Aspidistra,” and it will only bring up plants that match your term. The items for sale are listed in order of time, with the auction that is ending first being listed on top. Bidding is as for any auction. First you set up an account with eBay so you have a pseudonym for bidding (your identity is always kept secret). You win if, at the time the auction closes, you placed the highest bid. Shipping methods and cost vary with the seller. However, the cost must be posted and is usually equivalent to that charged by any commercial company. Shipping in cold weather may be at the buyer’s risk, even if the seller offers heat packs in the boxes. I would not buy plants in weather that is so cold that a normal commercial company would not ship. Remember, most eBayers ship with the U.S. Postal Service and the package could get left out in the cold.

Of course there is a risk dealing with unknown individual sellers, but eBay provides a seller ranking with buyer comments to ensure that only reliable sellers remain on their web site.

I received my first rare plants from an eBay auction in November. Two are grafted fascinated forms of *Euphorbia lactea* originally imported from Thailand, which I won for $7.50 each. In professional plant catalogs these normally sell for $35.00, if you can find them. I also got five rooted cuttings of *Euphorbia lactea* ‘White Ghost,’ a variegated succulent. All five were obtained for a total of $8.10 and (Continued on page 12)
Planting at the Campus Center

Michael Marcotrigiano

The new campus center is both artistic and controversial. Fortunately for the Botanic Garden, the landscape design was negotiable. We worked closely with Shavaun Towers, the Campus Landscape Architect, to develop a design that would minimize long-term maintenance while preserving the architects’ aesthetic. The embankment between Haven House and the Campus Center is too steep for planting grass—mowing would be impossible. Early plans called for woody vines, such as *Euonymus fortunei*, but in discussions with the crew, they expressed concern about raking and trash removal. Vines catch everything the wind throws at them. So we opted for *Liriope* (lily turf), which will fill in to look like a rich thick turf and be easier to clean up in the fall. On the patio we took a chance with some large bamboos. Their invasive nature is being kept in check with planters surrounded by cement, but they are marginally hardy so we have our fingers crossed. On the lawn side of the campus center we planted *Quercus coccinea* (scarlet oak) to replace the wonderful specimen that was cut down to construct the building. Unfortunately, it will be about 20 years before it is the size of the one that was felled. Alongside it are two *Quercus shumardii* (Shumard oak) and a large specimen of the disease resistant hybrid elm, *Ulmus* ‘Pioneer.’

On the Elm Street side are hedges of *Taxus* (yew) and *Ilex* (holly) as well as two nice clumps of Heritage river birch (*Betula nigra* ‘Heritage’), which have cinnamon colored exfoliating bark that will be highly visible all winter. To the side, in an attempt to eventually hide some of the loading dock and trash receptacles, we planted fast growing Chinese elm (*Ulmus parvifolia*) selections. It was great to be able to select fine specimens of all of these plants and have the crew of the Botanic Garden plant them properly and with care. Our first plunge into commercial scale landscape installation was a big success.

Internet continued

(Continued from page 11)

These normally run about $5.00 each in catalogs. I then bid on some cacti that the seller was unable to identify. Given the pictures he presented, I took a chance that they were what I thought they were and now have some very rare plants at a ridiculously low price.

I am not saying that auction sites will replace the way the world purchases plants. However, incredible plants, some of which I have never seen for sale, are listed on the Internet. For the smart buyer and collector it may become the place to buy that plant you’ve always wanted. I must admit I get more pleasure using sites like eBay to sell than to buy. I have gotten fantastic results selling offspring of some of my rare personal plants at very high prices. There are so many viewers on the Internet that you can reach that one person who absolutely must have the plant you are offering. Last year, someone bid over $400.00 for a dime-sized bulb of a very rare variegated aroid from my collection. I have no idea how I could have marketed such a rare plant except on the Internet.

I can imagine a day when the Botanic Garden augments its collection with some rare finds using such Internet techniques. We would do so only if the plant were not available elsewhere and if we were sure of the seller’s credibility and the accuracy of the plant identification. While some of the rarest plants on Earth reside in botanic gardens, private collectors have their share and now have a worldwide outlet to sell the offspring they produce.
The bids will go out in February for the renovation of Capen Garden. Landscape architect Nancy Denig (class of 1968), of Denig Design Associates in Northampton, has done a great job solving ongoing problems with the garden and adding elements that will increase the visibility and utility of the space. At last, we will have defined stone and metal entrance gates, one at the west side of Capen House and one on Prospect Street. A large water fountain will grace the new “classroom,” which will be a series of artfully arranged granite ledges on the edge of the garden. Other improvements are the realignment of the Jill Ker Conway Gazebo with the central axis of the garden rooms, the addition of a place to exhibit sculpture (student work rotated one per year), more educational labeling, additional trellises, and barrier fences to hide the work areas from view.

Over the years many plants have either lost their labels or plants of unknown identity were planted. This has limited the educational value of the garden since it is very hard to key out cultivars of phlox, for example, when they look so similar to one another. Given the fact that our visitors often want to know the exact cultivar names, the decision was made to sell or give away any plant that cannot be positively identified. We will replant the garden taking care to obtain known cultivars and to label them with reliable plant labels. Collections Manager Tracy Omar has determined which plants should stay and which should go, so this spring we can replant as needed. Fortunately, most of the woody plants and trees are labeled correctly and it is only some “faster to mature” perennials that remain unidentified and need to be replaced.

Generous bequests to the Botanic Garden by two sisters, Elizabeth Spetnagel (Smith class of 1928) and Louise Spetnagel (Smith class of 1929), provided the funding for this major renovation. The work will commence this spring and, if all goes well, be completed by the first day of classes in September.
Donation to the Limbe Botanic Garden

At the conclusion of last year’s Bulb Show, we again sold pots of bulbs, collecting donations for the Limbe Botanic Garden in Cameroon. We started this project after the 2001 Bulb Show, just before we began our renovations. It was such a success, we have turned it into a tradition. It is one of those win–win–win situations. The Botanic Garden is able to clear out the greenhouses after the show pretty quickly, our Friends and the public are delighted to get the bulbs, and the Limbe Botanic Garden benefits greatly.

A great benefit of membership in the Friends of the Botanic Garden is that you can come on the first day of the sale and have access to a much greater selection of bulbs. Just be sure to bring your membership card.

The dates for this year’s sale are:

Saturday, March 27, 9 am to 3 pm
(Friends Only)

Sunday, March 28, 9 am to 3 pm
(General Public)

The majority of the plants offered are hardy bulbs that can be planted outdoors as soon as the ground thaws. After the Bulb Show in 2001, the pots of bulbs brought in $900, and in 2003 the total reached $1400! These monies sent to the Limbe Botanic Garden in Cameroon have made a tremendous difference in what they are able to accomplish. Their staff is doing very important conservation work in this area of the world that is so rich in its biodiversity. The Limbe Botanic Garden has used the money wisely and seems to have accomplished an impressive amount with relatively little.

The Garden continues to work with farmers training them in the development of sustainable crops that provide economic, medicinal, and nutritional value. They are expanding their collection, propagation, and planting for the field gene banks for the *ex situ* conservation of threatened species.

Especially important is the fuel wood domestication program. In many parts of Africa, including Cameroon, villagers depend on firewood for over 90% of their heating, drying, and cooking. Supplies are diminishing rapidly and villagers are cutting down the forest for wood. The rich and fragile biodiversity on Mount Cameroon is becoming seriously threatened by fuel wood collection leading to deforestation. In order to reduce this threat on the forest, a fuel wood domestication program was initiated with the objective of identifying, collecting, and developing cultural methods for high-density production of quality firewood for domestic use and for sale.
Calendar of Events — Spring 2004

Spring Bulb Show

Opening Lecture & Reception
Friday, March 5, 8:00 pm
Wright Hall Auditorium

Continental Ideas for American Gardens

Lauren Springer is a contributing editor for *Horticulture* magazine, author of *The Undaunted Garden*, named one of the 75 best American gardening books by the American Horticultural Society, and coauthor with Rob Proctor of *Passionate Gardening: Good Advice for Challenging Climates*.

For years, Americans have looked to the English for garden inspiration, with a nod to Mediterranean and Japanese influences. Over the past half-century a new style of ecologically based naturalism has been evolving, making its mark in Germany and Holland. In many ways it mirrors some of our own recent regionally expressive garden styles in America. Lauren Springer will discuss some of the modern continental concepts and characteristics, illustrated with both European and American examples, to provoke thought and inspire ideas for our gardens.

Followed by a Reception in the Lyman Plant House and a Preview of the Bulb Show in the Illuminated Conservatory.

Spring Bulb Show
Lyman Conservatory
Saturday, March 6 through Sunday, March 21

Members-only hours:
9:00 – 10:00 am daily
(Please bring your membership card.)

Public Hours:
10:00 am – 4:00 pm

Special Evening Hours:
Friday, March 12 and
Friday, March 19, 6:00 – 8:00 pm

Bulb Sale — Benefit for Limbe
All proceeds go to the Limbe Botanic Garden in Cameroon (see story on page 14)

Saturday, March 27, 9 am to 3 pm
(Friends Only – please bring your membership card)

Sunday, March 28, 9 am to 3 pm
(General Public)

Lecture and Slide Show

How Not to Kill Your New Tree
Presented by
Michael Marcotrigiano
Director of the Botanic Garden
Friday, January 30, 7:00 pm
Church Exhibition Gallery at Lyman

Church Exhibition Gallery

The Botanic Garden: A Neighboring View
Photographs by Judy Messer
March 6 through June 13, 2004
Reception: Saturday, April 17, 4-6 pm

Environmental Studies Lecture

The Necessity and Now the Possibility of Bringing Wild Ecosystem Processes to the Farm
Cosponsored with the Environmental Science and Policy Program
Wes Jackson, President of The Land Institute
March 25, 7 pm, Seeye 106
Jackson discusses how, with additional research, an agriculture that is resilient and productive over the long term, economical, and ecologically responsible is within reach. Wes Jackson, born in 1936 on a farm in Kansas, established the Environmental Studies program at California State University, Sacramento. Jackson’s books include *Rooted in the Land: Essays on Community and Place*, *Becoming Native to This Place*, *Altars of Unhewn*, and *Meeting the Expectations of the Land*.

On the Page & In Three Dimensions:
Childhood Gardens and Playgrounds
Cosponsored with the Landscape Studies Program
Tuesday, March 30, time and place TBA
Smith alumnae and honorary degree recipients Cornelia Hahn Oberlander and Jane Yolen speak about their construction of spaces for playgrounds and gardens—in fiction and in three dimensions.
Presentations by each speaker will be followed by a discussion between themselves and with the audience.
You are invited to join

The Friends of the Botanic Garden of Smith College

ALL MEMBERS RECEIVE:

- A complimentary copy of *Celebrating a Century: The Botanic Garden of Smith College*, by C. John Burk
- *Botanic Garden News*, our newsletter and calendar of events, twice a year
- Admission to members-only hours at the Spring Bulb Show
- Free admission and discounts at 170 other gardens around the country
- 10% discount on Botanic Garden merchandise
- Advanced registration and discounts on trips and workshops
- Invitations to show previews and receptions

☐ YES, I WANT TO BECOME A FRIEND OF THE BOTANIC GARDEN OF SMITH COLLEGE!

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* local elementary or secondary teachers
** graduated within the past 5 years

Name:  
Class Year (alumnae):  
Address:  
City, State, Zip:  
E-mail:  

Enclosed is my check to The Friends of the Botanic Garden of Smith College in the amount of $  .

All contributions are tax-deductible. Send to: Friends of the Botanic Garden of Smith College, Northampton, MA 01063.

Or you may join on-line at www.smith.edu/friends