Sculptor introduces students to new design techniques

Although his career pulled him off campus 20 years ago, Micajah Bienvenu is now back making art at Whitman.

When he was a 19-year-old art student, an acquaintance took one of his sculptures to a gallery in Seattle; the gallery offered to show his work. “I sold out the first show and never looked back,” said Bienvenu. In fact, a collector recently bought the first piece Bienvenu ever made at Whitman for $10,000.

Now, his work is displayed in galleries and elsewhere all along the West Coast from Alaska to San Diego. Last year, Bienvenu offered to donate one of his pieces to the College, and President Cronin arranged to buy another, bringing two new sculptures to campus, tentatively titled Triumphant Arc and Pirouette. Students and faculty will soon determine more permanent titles for the pieces.

Currently, several art students are collaborating with Bienvenu on the design of a third campus sculpture. The group has brainstormed several possible shapes based on natural elements. “I think that’s a really good way to teach, to show students how a professional does it,” said Bienvenu.

A visiting Whitman student from Walla Walla High School, Greg Hansen, sat in on Bienvenu’s tutorial. “I was interested in how he translated something into sculpture using technology,” Hansen said, adding that many of the proposed designs followed Bienvenu’s abstract, fluid style. “We were trying to design something related to the direction of the wind,” added Jaimes Valdez, ‘03, who is currently working as a technical assistant to the art department.

Bienvenu’s early work was mostly representational. He hammered metal into complex curves representing salmon, heron, and other wildlife. His art found its way into museums and galleries — successes he attributes to “working hard.” Five years ago he began pioneering computer-aided sculpture design and fabrication, a process that only a handful of sculptors use today. In his current work, Bienvenu uses artificial diamond sandpaper on stainless steel to create interwoven calligraphy-like patterns and translate emotions into three-dimensional forms.

Students who attended Bienvenu’s workshop were encouraged to experiment with his digital design techniques. “The use of computers puts a whole new spin on the production of art and on the artist’s touch,” said Amber Shay, ‘04.

During his 22-year career as a sculptor, Bienvenu has seen a change not only in his own style, but in the artistic landscape. “There has been a shift away from conceptual and ephemeral work,” observed Bienvenu of modern sculpture, adding that, “more permanent, civic work has been embraced.”

Bienvenu is on the board of the Westcott Bay Institute on San Juan Island. The institute has a 19-acre sculpture garden with more than 90 sculptures. He hopes to interest Whitman students and faculty in visiting the garden and submitting their work to the project.

— Jeff Ives, ‘04
Rob Manning, ’80, engineers Spirit landing on Mars

By Cathy Grimes, Walla Walla Union-Bulletin, January 15, 2004

The man who guided the Mars rover Spirit to a landing in the red planet’s Gusev Crater on January 3 said his years at Whitman College helped him land in the mission’s driver’s seat.

Rob Manning, ’80, chief engineer with NASA’s Jet Propulsion Laboratory in Pasadena, California, said the self-discipline and study skills he developed at Whitman led to fulfilling his dream of becoming a space engineer.

The skills he gained in college before graduating in 1980 led to his career at the laboratory and his high profile work on the Mars mission. Manning, 45, is the entry, descent and landing manager for the Mars exploration mission’s rovers. He supervised Spirit’s successful landing and [was] at the helm when Opportunity [headed] to the Meridiani Planum on the other side of the planet January 24.

Speaking from the laboratory on Wednesday [January 14], Manning said the past 10 days have been hectic, stressful “and a kick in the butt. It’s an experience and a half.”

It’s also the culmination of three years’ frenetic design and testing activity performed under close scrutiny. Past Mars missions have had a spotty record of success. Manning was chief flight engineer for the Pathfinder mission in 1997, one of the more successful missions, which sent a small rover named Sojourner onto the planet’s surface. “Pathfinder was a demo,” he said. “We had to do that first to find out if it was accessible. Pathfinder was the poor man’s geologist. . . . These are rovers with PhDs.”

Manning said the focus on the $820 million Spirit and Opportunity rovers has been much more intense than Pathfinder, which he called an “under the radar” mission. Spirit and Opportunity employ more sophisticated technology and an array of new instruments, all packed onto a six-wheeled remote-control vehicle the size of a golf cart.

“To get it all to fit we kind of had to use origami techniques,” Manning said. “The mechanical complexity of it vastly exceeds Pathfinder.”

Manning said he was “one of the instigators” of the Mars rover mission, developing the idea in 1997 with fellow engineers. They shelved their proposal until April 2000, when they dusted it off and submitted it for funding consideration.

“Much to our shock, it was accepted,” he said.

Manning and his fellow engineers thought they could build on the Pathfinder work, but instead found themselves developing new equipment, instruments and software capable of more accurate work over longer periods of time than the initial probes.

“There’s a lot more science associated with the rover missions,” he said. Manning said working on two vehicles provided some benefits. The teams were able to test assumptions and design ideas. “If we’d only had one vehicle, we’d never have made it,” Manning said.

In fact, scientists built six rovers. They sent Spirit and Opportunity to Mars and used the remaining vehicles to test instruments, software and mechanical systems almost around the clock. He said the high visibility and focus on looming deadlines made the work more difficult.

“The pressure to do it right made something wonderful and exciting much harder. . . . It was not fun. We were on a tight line,” he said. “There was no time to stop and appreciate people’s work, no time to acknowledge accomplishments. We worked right through lunches.”

They also worked through evenings, weekends, holidays and vacations. Manning said his greatest satisfaction so far is knowing his team’s work finally is seeing the payoff for their sacrifices.

“We didn’t finish testing software until late November,” Manning said. “We didn’t get it loaded onto the rover until December, just weeks before the scheduled landing.

“The software worked perfectly,” he said. “I’m very proud of these people. To see everything they’ve worked for happen is incredible.”

Spirit hit the planet’s surface encased in a nest of airbags much like a spittlebug surrounded by bubbles. . . . Manning said the rover bounced 28 times, travelling about 990 yards before coming to a stop.

Over the past 12 days [January 2-14] Manning and other scientists supervised deflating the airbags, setting up the rover’s wheels and maneuvering it into position to roll off its landing pod onto Martian soil, often to the accompaniment of tongue-in-cheek music selections, including The Beatles’ “Good Morning, Good Morning,” and Bob Marley’s “Get Up, Stand Up.”

At all points thus far in the mission, systems and programs worked better than dreamed, Manning said.

Working with teams of scientists, designers and engineers has been the most enjoyable aspect of his work on the project.

“I love it when people click, and you all start thinking as a single brain,” he said. “That’s a thrill. I feel more like a coach than a manager.”

The man who once spent hours studying beneath a portrait of Chief Joseph in Penrose Library and regularly hitchhiked to Spout Springs Ski Resort said his work on the Mars mission is not yet over. After landing Opportunity on January 24, he will help manage some of the surface exploration projects, maneuvering what he called the ultimate remote-control vehicle.

“I never had a remote-control vehicle. I always wanted one but I’ve always been too busy,” he said, chuckling. “Now I have two.”

Spirit and Opportunity were scheduled to conduct experiments for the next 90 days on Mars. Asked what he plans to do when the mission wraps, Manning laughed. “All I know is I’d like not to work that hard for a while,” he said. “I’d like to take some time off and take a real vacation with my family.”
Faculty mentors, Choral Contest, sunny afternoons on Ankeny Field, late night debates on the meaning of life... Life in the Whitman community is personified by these traditions and many others. Contributing to the College is another proud tradition. Over 85 percent of all alumni have contributed at some time to the Whitman annual fund, a remarkable record.

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The Whitman Collection

Professor David Schmitz was among the first American scholars invited by the Vietnamese government to visit that country. Last January, he returned to Vietnam leading 33 alumni, parents, and friends of Whitman College (as well as current student Joe Heacock, ’04) on the alumni office-sponsored Vietnam trip.

The tour was high praise from critics. Mark is still “the only full-time lawyer in Netherland, Colorado.” (See Births.)

Schmitz is currently teaching a class on the Tet Offensive. Student Joe Heacock, ’04) on the

The Whitman group landed in Ho Chi Minh City and traveled north over 11 days to Hanoi. The experience included assigned reading and lectures by Professor Schmitz in a variety of venues, accompanied with lectures by Vietnamese historians. A visit to the tunnels of Cu Chi included a lecture by a National Liberation Front veteran who had lived in the tunnels during the war. The Whitman group also toured Danang, My Son, Hue Hoa An, the DMZ, and Ha Long Bay.

Interest in the tour was high, and spaces filled a year in advance, as often happens with alumni trips, said trips coordinator Margaret Hoglund.

Professor Schmitz has taught a course on America in Vietnam since he arrived at Whitman in 1986, and it is regularly filled to capacity. Four former students participated in the alumni trip. Schmitz is currently writing a book on the Tet Offensive.

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Professor Schmitz leads Whitman tour of Vietnam

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