

# Saving Brace

**Jeremy Murray's orthotic devices relieve pain and restore careers**

By Catherine Kavanaugh

**P**laying the rich notes of the viola used to be so painful for Caroline Coade, she wondered if she could keep her place in the string section of the Detroit Symphony Orchestra, one of the top 10 symphonies in the United States.

Four bulging discs in her neck were only part of the reason the first-chair violist struggled to create music. After five months of physical therapy, Coade still had serious problems with the mobility in her right hand, particularly her thumb.

"That's the hand that holds my bow. It's my artist's paint brush," she said. "I had to figure out why I was having this chronic pain."

Her doctor sent her to see orthotists Jerry McHale and Jeremy Murray ('08) at the

Michigan Hand & Sports Rehab Centers in Warren. Coade remembers walking into the office filled with tools to fabricate protective gear, including the facemask worn by Detroit Piston Richard "Rip" Hamilton.

"I was desperate," Coade said. "I thought my career was over. It was my livelihood, and had been my passion since I was five years old."

For two months, McHale and Murray studied her wrist motions as she bowed her instrument.

"I'd play my viola and they would take pictures, make molds and adjust Velcro straps," Coade said. "It was our Tuesday morning musicale."

The attention to detail paid off. Coade was fitted with a customized brace to immobilize her



Jeremy Murray receives thousands of requests for custom facemasks and made the mask worn by NCAA Player of the Year Tyler Hansbrough (University of North Carolina).

Photo by Cara Jones





Richard "Rip" Hamilton first wore his mask near the end of the 2003-04 NBA regular season. The Detroit Pistons won the NBA Championship that year, defeating the Los Angeles Lakers.

guard got an ultimatum: wear a facemask every game or risk an injury requiring significant nasal reconstructive surgery.

"Wearing the mask serves a definite purpose," Hamilton said. "I guess it has grown into becoming part of my identity as well when I'm out on the court."

Murray, who took over for McHale in 2004, makes facemasks with sheets of the same plastic used for bulletproof glass, only thinner.

"It can't stop a bullet but it does protect against impact," Murray said. "If Rip's hit in the nose again it could be career ending."

Hamilton's mask is like a second skin except for a gap around the nose to spread any force over a greater surface area. It has proven to be reliable protection, allowing him to contribute to an NBA championship in 2004, the second best 42-game start in NBA history, and conference finals in 2005, 2006, 2007 and 2008.

"I've worn the mask so long now, it's almost like a part of my uniform," Hamilton said. "I haven't worn any masks other than the ones that Jeremy has made and I don't see myself switching anything up either."

When word got out that Murray is Rip's mask maker, business boomed. This year he will make 125 to 150 facemasks, with 90 percent going to high school and collegiate basketball and soccer players. The devices protect against nose fractures, and shield broken jaws and cheekbones.

The photographs of athletes on Murray's office walls are a testimony to the stakes riding on his ability to individualize braces and facemasks. There's Pistons guard Rodney Stuckey, who broke his hand in the final pre-season game of his rookie year and needed a splint, and Piston's forward Antonio McDyess, who broke his nose in a 2008 playoff game against Philadelphia.

"It was a Friday," Murray recalled, when McDyess was hit in the face by a

thumb joint when she wasn't performing. Her thumb needed down time after 35 years of rehearsals and individual practice for five concerts a week.

"It was sheer wear and tear," Coade said, adding, "Musicians are athletes too. We just use smaller motor groups."

She is one of hundreds of clients to give Murray two healthy thumbs up for his orthoses, which he makes for the hand, face, neck, back, shoulder, hip, knee and foot.

Murray, 31, of Milford knows that when he stretches melted plastic over the plaster mold of someone's injured body part, their future is in his hands. The braces he makes give clients relief from pain, confidence to perform at their peak level and a chance to chase dreams without worry of repeat injury.

Hamilton began wearing the most recognized sports orthosis in the world after breaking his nose once in 2002 and twice in the 2003-04 season. The All-Star

Photo Courtesy: Allen Einslein



Photo by Cara Jones

76er going for a rebound. “He flew back for surgery on Saturday and played again on Sunday with a facemask he wore through the playoffs.”

Last season four Pistons wore facemasks. In 2007, Murray also was called to help Tyler Hansbrough, a forward for the University of North Carolina hurt in the last game of the season.

“It was real dramatic,” Murray said. “Ten seconds left on the clock. All the starters in and this guy just hammered Tyler across the face and broke his nose.”

Hansbrough was fit with a facemask in North Carolina but complained it was uncomfortable and cut his vision. His trainer took a cast of his face and shipped it to Murray. The rising star wore Murray’s mask in the NCAA basketball tournament.

“He’ll probably be player of the year this year,” Murray said of Hansbrough, who swept all major individual honors in men’s collegiate basketball last season.

Another portrait on the wall shows a smiling 12-year-old boy from El Salvador named Juan Andres Porrás. He is a winning soccer goalie clutching a precious medal.

Murray fit the boy with a facemask

after he underwent 10 surgeries to correct facio-fronto-nasal dysplasia. The rare genetic disorder causes skull and facial abnormalities. It left Juan with a gap in his face from his lip to his forehead, where doctors implanted a four-inch bone.

Juan’s mother insisted he get a facemask. Murray bluntly explains why.

“She wanted to make sure he didn’t mess up his surgeries or worse, kill himself,” he said.

Murray hears from a lot of parents who can watch their children compete without wincing every time a ball or opponent comes near them. The father of a boy struck in the face with a baseball bat credits Murray’s facemask with giving his son and him a new sense of security.

“I believe our son is a lot safer now and he will play with confidence while I watch with confidence,” said Don Caraccio, adding the facemask withstood a deflected foul ball.

Murray has a good track record for keeping athletes safe.

“I’ve never had anyone re-injured wearing one of my masks,” he said. “A couple years ago Rip got elbowed and the mask cut his eye but his nose wasn’t broken again.”

Murray learned his trade at Eastern Michigan University. He was an occupa-

tional therapist specializing in hand therapy when he signed up for the graduate certificate course in orthotics in 2006. He was certified in March 2008.

“I was in the first class with more than three people,” Murray said. “We had about 15.”

Murray works in a lab with a metal grate floor and two washtubs. One is filled with plaster for making casts, and the other with dirt to hold them up to dry. When a mold is ready, Murray takes it to a fabrication area. He mounts it to a table and cuts a sheet of plastic to size. He sets the plastic in a “glorified pizza oven.” After a few minutes, it is pliable and he places it over the mold and sets the shape with a vacuum system. Then, he trims the excess and polishes the edges.

Coade wears her brace at least six hours a day to rest her thumb. She said, “I can play without pain. Jeremy is a great at problem solving and he is genuinely interested in helping people.”

The viola can be played with passion again. Voila! 🎻

*Freelance writer Catherine Kavanaugh ('86) lives in Dearborn.*

## By The Numbers

- Facemasks made in 2008: 125
- U.S. states masks sent to: 35
- Foreign countries masks sent to: 9 (Poland, Israel, Mexico, Costa Rica, Germany, El Salvador, Belgium, Canada, China)
- Farthest mask sent: Hong Kong
- Pounds of plaster used per week: 50 lbs.
- Number of website inquiries/month: 550
- Number of sports masks have been made for: 14 (basketball, soccer, baseball, softball, cycling, field hockey, squash, mixed martial arts, karate, Aussie rules football, slamball, cheerleading, flag football, volleyball)
- Number of straps sewn for facemasks: 500
- Number of hand braces made for arthritis/year: 120