

# CHEMECOLOGY

## Chemist Raps About Science Education

**K**nowledge is power—pump it up.” This is the rather unconventional message that Tyraine Ragsdale, chemist and lead lyricist with the rap group Grand Hank, tries to convey to children, particularly kids in the inner city. And, he says, it’s working.

Ragsdale is a research associate in spectroscopy and medicinal chemistry with R.W. Johnson Pharmaceutical Research Institute. But he is equally at home on stage telling students in their own “language” the importance of education, especially in science.

Ragsdale was born and raised in Philadelphia, Pa. Growing up, he recalls, he was exposed to drugs, crime and violence. “Living in the inner city it was always clear to me that in order to achieve things in life, education was the key,” Ragsdale notes.

“I had always sought education as my way out,” he continues. “And I made a promise to myself that if ever I was in a position to be able to give back and help my community I would. So, actually

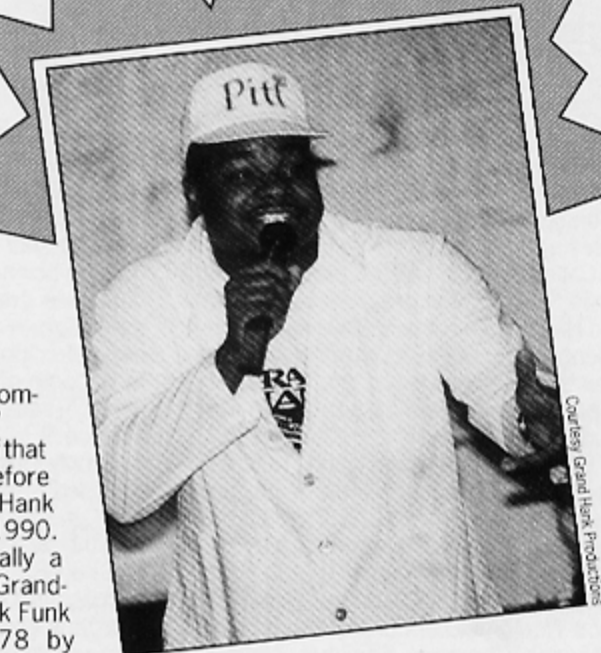
promised—doing what I committed to early on in life.”

Ragsdale’s fulfillment of that promise began even before the formation of Grand Hank Productions, Inc., in late 1990. The corporation is actually a formalized extension of Grandmaster Hank and the Punk Funk Nation founded in 1978 by Ragsdale and his brother Lamont. The group evolved in an effort to reduce the neighborhood crime rate by sponsoring community events.

Grand Hank Productions currently has 18 people on staff. Setting their sites high, the Educational Rap Lecture was their first project.

Approximately 15 schools and other organizations across the Philadelphia area have been treated to the group’s unusual presentation during the past year, and many more performances are planned over the next 12 months.

“We’re putting together a tour right now,” Ragsdale says. “Actually, we’re on tour as



Ragsdale is the president and lead lyricist for the rap group Grand Hank.

we speak. It’s a 30 school tour in the Philadelphia area. We’re taking it into 10 high schools, 10 middle schools and 10 elementary schools that have been chosen because the students there are considered at-risk.

“We’ve done it on a collegiate level,” he adds. “We’ve done it for public and private organizations and the response has been overwhelmingly enthusiastic. The children love it. So we’re taking the message everywhere we can possibly take it.”

According to Ragsdale, the reason that the program is so successful is that today’s kids “eat, drink, and sleep rap music.”

“They love rap,” he says. “It’s their voice, the way they communicate.” And, he notes, rap music transcends all cultures.

Promoting science education with rap music has the added benefit of countering the notion shared by many kids that scientists are generally a nerdy bunch.

“Most people think that science is something that is not good, that scientists are nerds,” Ragsdale explains. “By me putting something together that is sort of right in tune with the mainstream rap music, it adds another twist to it. Because they say, ‘Hold up! I didn’t think that you could be cool and put out good music like this.’”

In addition, Ragsdale uses his music as an opportunity to tell students, especially minorities, about the contributions of black scientists.

“I did a song about black scientists ‘Scientist Afro-American,’” Ragsdale says. “What it’s designed to do is to scroll a short list of scientists who were Afro-Americans and list some of their achievements.”

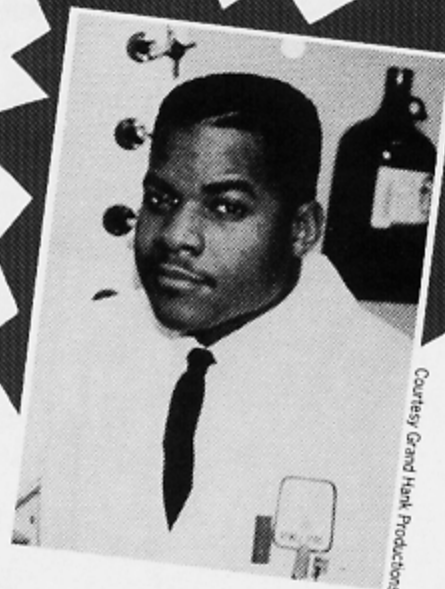
“One key to the song is that children, especially minority children can begin to associate themselves with Afro-American inventors from the past,” he notes. “There’s a big barrier that most children have in that they believe they can’t do science because they don’t see a lot of black scientists around and when they read books a lot of these scientists are not mentioned.”

“So,” Ragsdale says, “they feel as though, ‘Well, we can’t do science. Science isn’t for us.’ But when they find out that Charles Drew did this or Eliza McCoy did this, or Lewis Vladimir did that, then they say wow, that’s cool. And they believe, they begin to think and not only think, but believe, that they can achieve that abstract level of thinking which is involved in the scientific process.”

It is very important, Ragsdale says, that the person bringing them this message is a scientist himself. “If we’re interested in actually really bringing students into the field of science,” he stresses, “we have to put scientists back into the community to recruit. It

sounds a bit different when you have a human resources recruiter talking to students that they should come into science, science is great. It’s different when you have somebody who is actually in the scientific field saying, ‘Listen, I practice science. This is the low down about science.’”

Ragsdale knows this to be true because as a student he recalls being skeptical of non-scientists who pushed that area of study. “When I talked to the recruiters about science I would ask,



Tyraine Ragsdale, chemist at R.W. Johnson Pharmaceutical Research Institute.

‘Are you in science?’ and they would say ‘Well, I’m not in science but science is great.’ And I would think, you’re not a scientist, how can you expect me to want to be in science.”

The fact that Ragsdale shares a similar background with much of his audiences also lends him an air of credibility. For example, in the song “Education,” Ragsdale raps about the importance of parental influence while acknowledging that many of these kids come from single-parent homes.

“‘Education’ was written based on an experience that I had in growing up as a child,” Ragsdale explains. “I came to the conclusion that there were three factors that really influence how I was educated, or whether I was going to go

to college or the like. And that was the parents, the teachers and the environment.”

“‘Education’ talks about how all three of those factors really play a significant part in determining whether children will go on to college or whether they will finish high school or whether they will just drop out of the educational process all together. And if these three components don’t work in sync with each other, the process becomes much harder.”

The lyrics to “Education” make it clear to the audience that Ragsdale identifies with them and understands the problems they are faced with.

In the song, he tells parents, “Parents, you are the ones who lay the foundation whether good or bad. You have to give your child the knowledge they need to have. Encouragement and motivation have to come from home. But the fathers walk out and leave the mothers alone.”

“So,” Ragsdale says, “‘Education’ clearly states that here’s the situation that happens and at the end it says, ‘give your support. Do your job and don’t sell yourself short.’”

According to Ragsdale, the teachers love the program. “They’re saying they would love to have this as a supplement in their classroom and as reinforcement because it’s basically reinforcing exactly what the teachers and the parents are saying,” he notes.

Money is the main obstacle to bringing the program into more schools. “The thing is what we’re looking for now is sources of funding,” Ragsdale says. “I’d like to see the program expand nationally. I think that this is something that children like. So, they’re truly interested. It’s been tested and the response has been overwhelming. And if we could get the children to start reciting and repeating positive things then that’s a start in having them reverse the trend of thinking negatively about everything.”

With the proper support, Ragsdale is sure that Grand Hank could reach countless more students. “There’s no number,” he says, “I think the more people we touch the better chance we have of getting people incorporated into the process.”

“That is the objective of this whole program,” he notes, “and that is to change the way our children view science and to incorporate them into the educational process.” ■

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