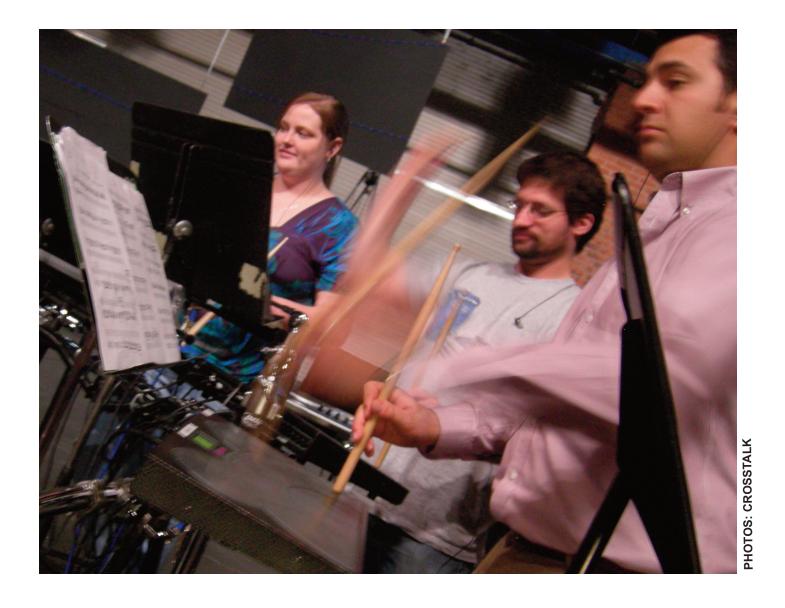


# Putting the 'e' in ensemble



It's been just over a decade since the world's first electronic percussion ensemble made its performance debut. Founder **Norm Weinberg** reflects on the roots and progress of CrossTalk.

MY ADVENTURE IN electronic percussion started in 1983 when my family bought me an IBM PC Junior to help me work on my dissertation at Indiana University. In early 1984, my house was robbed and the thieves took my new machine. I went to the computer store to look for a replacement and the computer salesperson said: "We just got this in; you should take a look at it." It happened to be the Macintosh 128k computer and installed on the machine was a piece of software called Professional Composer. This was the first music notation programme I had ever seen. On

the top staff, I entered quarter notes; on the second staff, I entered eighth notes; on the third staff, I entered triplets and on the fourth, I entered 16<sup>th</sup> notes. Then I turned the machine on and was thrilled to learn that the notes lined up properly. I immediately decided this was the computer for me.

I got involved in electronic percussion in the summer of 1984, soon after buying that early Mac, but my approach to electronic percussion was always as a pedagogical tool. I was one of the pioneers in using electronic percussion instruments in applied lessons on a daily basis. I also taught courses on electronic percussion to interested students at Del Mar College.

However, I was interested in using new technology for performance, in addition to teaching, but I never had the opportunity nor the necessary gear. When I was interviewed at the University of Arizona, I made the formation of a new electronic performing group one of my central research concepts. The administration was very supportive of this idea and the formation of the group became a part of my hire package at the university. I originally asked for something in the order of \$25,000 to get the group up and running and we finally compromised at \$7,000 per year for the first three years of my employment.

During the first year, 1997, I contacted E-mu Systems and arranged a partnership whereby the University of Arizona would buy two E-6400 samplers and the company would donate another two to the school. This was a win-win situation: we were able to acquire four machines and E-mu was able to take a tax deduction for the donation. I

on es; on the already had a drumKAT, and the studio already owned an older first-version malletKAT. We ordered two more drumKATs and another malletKAT and we were on our way.

The group started out by playing a few arrangements and trying to convince some composers to write for us. From the very beginning, the main concept was to try to create a new musical experience for the students and our audiences. We've never been interested in trying to play traditional percussion ensemble music or music that was created for acoustic percussion instruments in an electronic manner. We were trying to do something different — to prove that percussionists can sound like anything in the world. We can play pop music, jazz, club music, classical music, experimental music and alternative music.

The event that really set CrossTalk in motion was an invitation to perform at PASIC (the Percussive Arts Society International Convention) in 1999. The group had only been active for two years, and we really had to step up our game in order to find an hour of music and present it in a truly first-class way. Our previous concerts had been in conjunction with other percussion ensemble groups in the studio. For example, CrossTalk had performed as a guest ensemble in a steel band concert or the percussion ensemble concert and played two or three compositions. Going into PASIC was a big step.

Once we made that leap, we were able to keep the momentum going and host our own concerts.



# **Progress**

In general, students learn to play traditional instruments by getting an instrument and playing in their middle school or high school band: "Here's your trumpet, this is how you play it, you're in the band and we have a Christmas concert in 12 weeks." In a way, CrossTalk is similar: "Here are the controllers, here are the computers, here's how they work together, here's your music, we start rehearsing this piece on Thursday." Students are much faster and smarter than you might expect. More often than not (almost always), if you set them up like that, they'll come into the first rehearsal ready to play. They're interested in learning how to programme the controllers, how to create sounds that have their own signature and, of course, playing their parts really, really well.

We also have a great culture in the studio where more seasoned students will help the newest students with programming and sound design. There's a lot of sharing between members of the group, and it seems to work out well.

From the very beginning, the dynamic of the group has been very much like a band, rather than a university ensemble. I encourage student comments, suggestions, corrections, ideas, etc. You wouldn't normally look at the conductor of an orchestra and suggest that the tempo needs to be a little brighter, but in CrossTalk, student suggestions happen all the time.

As the group has matured, students have taken more and more of a leadership role. We've also been able to partner with other areas of the university for some truly amazing productions. A few years ago, we collaborated with the stage technology programme in the School of Theatre and the School of Electrical Computing and Engineering (ECE) to create a production based around the idea of astrobiology called "New Genesis". The main theme of this production was using light as an essential element in the music, the stage blocking and the storyline. The ECE and theatre students built some fantastic instruments that were played by either breaking light beams or shining lights onto sensors. It was an amazing experience.

Last year, we added the School of Dance to the collaborative mix and won a \$30,000 grant to produce a show we called "SPEED". We commissioned Eric Bikales, an old friend and a great composer, to write a score for the group and partnered again with Alternate Mode, Zendrum, Native Instruments, Ableton and Fisher Technical Services. All in all, the project incorporated the skills and talents of about 10 faculty and nearly 30 students from all the different disciplines. It was awesome! I learned so much!

# **Technology**

Over the years, the biggest development has been the total transformation away from hardware synths to software synths. At one point, the group was using 15 different sound modules in live gigs. There was an element of terror in each one of our performances. It seemed that there were always issues in getting the MIDI switchers to respond correctly, getting the controllers to call up the right programmes and getting the proper samples loaded into all the machines. There were certainly a couple of nightmare situations.



Setting up is an involved task, with so many connections and triggers.

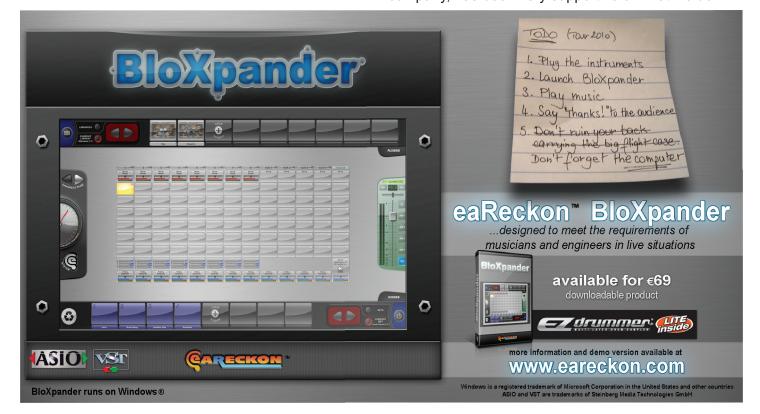
I remember one gig where I was pacing back and forth backstage before the performance. One of my students came up and asked me why I was so nervous since the group had all the music down cold and we were playing our butts off. I told him that I wasn't nervous about the group, I was nervous about the gear working properly. It was at that point when I decided that we weren't going to continue down that path.

The very next semester, we sold all of our sound modules and bought two custom-built PCs to run a programme called GigaStudio. The sounds were amazing, but the software was buggy. You really had to handle the machines and the software with kid gloves, and sometimes the machines would freeze or the software would crash for no apparent

reason. And, when a computer goes down in CrossTalk, it's "game over".

We made the switch to Reason a few years ago and it's been great. I love the fact that we can work with samplers, a number of different synths and effects, all inside the machine. The students like working with the programme and can get it up and running in a basic way in a very short time. What I like the most about Reason is that it simply does not crash! We've been using it for several years now – from version 2.5 — and it's never gone down. Never.

In terms of controllers, we rely heavily on Alternate Mode's drumKAT, malletKAT and trapKAT machines. It's easy for Alternate Mode products to be upgraded, and Mario DeCiutiis, the owner of the company, has been very supportive of what we do



and has helped keep our machines up to date with the most current operating systems. Many of the controllers we use today were purchased back in 1997, when the group first started. They've stood up well.

# **Future plans**

The group is currently on a break because I am on sabbatical, but we'll be back in action in the northern spring when we have some pretty exciting things planned. My sabbatical project was investigating something called "telematic performance". I spent two weeks with Scott Deal and other faculty at Indiana University-Purdue University Indianapolis who have a great deal of experience with telematics. I picked their brains as much as I could, and I'd love to add the telematic element to CrossTalk's live performances.

The idea behind telematics is that performers can be in different locations and collaborate in a musical or dramatic performance in real time. In order to make this more viable, we're working with Internet 2. Internet 2 is many times faster and more stable than commercial Internet, making the potential for telematics more promising. In addition to the telematic work, we're also going to be performing an arrangement of Frank Zappa's composition Peaches in Regalia, and I'm currently working on a new composition heavily influenced by the group Sigur Ros. We'll also add a few new compositions to our repertoire and perhaps pull out a few works that we've played in the past. We've got a killer arrangement of Discipline by King Crimson (which is heavily influenced by Bill Bruford, this month's profiled artist), and a couple of very cool compositions by Eric Bikales.

Currently, the budgets at Arizona, like the budgets in just about every state university, have been slashed to the bone. It's difficult to find funding to keep the group state-of-the-art in terms of both hardware and software. We would love to find a "sugar daddy" that would support the group in a permanent way. We've been very good at making whatever funding we have stretch as far as possible. But, we do need a little updating. Two of our computers are getting a little long in the tooth, and I'd love to be able to replace them with more robust machines. We need to make the transition to Reason 6, and there are a number of new sound libraries that I would like to add to our palette. And I'd love to hold another composition competition. We've been able to expand our literature and push the group to new frontiers. We like to say that we're on the "bleeding edge" of technology.



### **Current Crosstalk Gear**

### Controllers

(4) Alternate Mode: DrumKAT Turbo

(2) Alternate Mode: MalletKAT Pro (4 octave)

(2) Alternate Mode: TrapKAT(2) Zendrum: Zendrum ZX(2) Zendrum: Zendrum LT

(1) Korg: PadKontrol

(2) M-Audio: Trigger Finger

(1) Akai: APC40

(1) Roland: HandSonic(1) Korg: Wavedrum

### **Sound Modules**

**For live performance** (In addition to the Wavedrum and the HandSonic)

(2) Custom PC computers running Reason 4.0, 2GB RAM

(2) MacBook Pro 2.66 GHz Intel Core i7 Over 4TB of hard drive space.

In addition to Reason, CrossTalk uses Native Instruments' Kontakt and Ableton Live. The group has access to an impressive and extensive sound library for all three software platforms.

## For Sound Design

(1) E-mu: e6400 sampler

(1) E-mu: Extreme Lead

(1) Roland: JP8080 synthesizer

Native Instruments: Absynth, Battery, Reaktor, FM7

Arturia: Moog Modular V, CV-80S

### **MIDI Control**

(2) Mark of the Unicorn: MIDI Time Piece

(4) MIDIJet Pro Wireless MIDI Systems (for wireless performance with Zendrums)