

## **Supplementary Material**

Volunteer recruitment has tended to focus on Matthew's immediate program or social environment. At times, it was necessary to recruit outside of his undergraduate dormitory or graduate program. Recruitment has always benefited from the fact that the true time cost to the volunteers is about ten minutes for the glucose checks and insulin measurements because, in general, Matthew's helpers also need to eat and so could simply plan on doing so while helping Matthew to maneuver the unpredictable geography of dining halls or hospital cafeterias.

During his undergraduate training, most of the necessary recruiting was done by Matthew, his friends or the academic dean of Yale's Silliman residential college. Limited recruitment was done by The Department of Biology and Matthew's extra-curricular organizations (particularly The Yale Precision Marching Band). Matthew was able to coordinate the volunteers due to the fact that if someone missed an appointment, the Yale University Health Service was less than a block from his dormitory. Volunteer training was carried out by senior volunteers, the Yale University Health Services(YUHS), Matthew's mother and volunteer-trainers from Yale-New Haven Hospital. Matthew was expected to go to the Yale infirmary on Saturday and Sunday mornings due to YUHS' desire to monitor Matthew directly and the difficulty inherent in getting undergraduate students out of bed at 7:30 AM on weekends.

Training on the routine has always meant having an experienced person demonstrate the glucose monitoring and insulin measurements to groups of no more than four or five recruits. These recruits would then come back for an individual session during which they

would perform the needed tasks with an experienced person supervising. If they were uncomfortable with steps that they needed to perform after doing them under supervision once, they could come back for a second supervised run-through.

Volunteers have always been allowed to choose to be "regulars" or "reserves" with a combination of the scheduling preferences of the senior volunteers, the new people and Matthew's comfort with the new recruits setting the final schedule.

During his undergraduate work, Matthew could easily go to the Yale infirmary if a student didn't meet him for an appointment. However, the geography of Princeton's campus made it difficult for him to get to the McCosh health center without assistance that was provided by Princeton on weekend mornings and at other times when needed.

Many volunteers were recruited from the Woodrow Wilson School of Public and International Affairs. Due to the small size of the Wilson school's student body, Princeton's undergraduates were recruited to fill out Matthew's schedule. He also joined and ate most of his meals in one of Princeton's undergraduate "eating clubs". Ultimately, the Princeton undergraduates became his primary source of volunteer support and were essential in socializing him into the Princeton community.

Due to the need for assistance in navigating in his eating club, a set of lunch-time volunteers became necessary. Managing the volunteers was done jointly between Matthew and a student coordinator who was found to assist him with ensuring that people

would be there when needed to assist him with his glucose checks, insulin dosage measurements and in navigating the difficult environment that a communal eating space represents. Each of the two years that Matthew was at Princeton, a new senior took over the coordinatorship. In both cases, the coordinator's efforts were recognized in the form of a letter of recommendation written by a senior officer of the Princeton Graduate School.

Whereas The McCosh Health Center was relatively close but difficult for Matthew to access independently, the Harvard University Health Service is nearly three miles from the Longwood Medical Center. Given winter weather and Boston's often-difficult traffic, it could not be used as a place of assistance should a student miss an appointment. For this reason, it was decided that the student coordinator would be paid. The coordinator was expected to help Matthew schedule the volunteers and to act as a secondary back-up should a student not come for an appointment and a mass electronic mailing to the rest of the volunteers not receive a fairly quick response.

Volunteers were recruited by the dean of student affairs at HMS as well as by flyer to the various basic sciences departments in the Longwood Medical Area. Many students were trained to do the glucose checks and insulin dosage measurements by Matthew's mother who stayed on campus for ten days to facilitate this and other set-up tasks. The rest were trained by their peers.

Matthew has lived and worked in the Yale Medical Center since his return to New Haven in 1997. Because students often live closer to the Yale School of Medicine than to The Harvard Medical School, coordinating them has been easier, but a student coordinator is still an important part of Matthew's support. Students have been recruited from the Yale School of Medicine each September with recruiting by electronic mail across the entire university every April for summer assistance. Undergraduates, graduate students, students in the schools of nursing, medicine and public health and postdoctoral fellows in the life Sciences have been most of Matthew's volunteers. About ten percent of his helpers have come from disciplines ranging from Astronomy and French to Literature and Political Science.

Matthew has signed a liability waiver for his universities at all levels of his training. In all cases, a supportive environment has been essential in facilitating the creation and maintenance of these groups of volunteers.