ADNI Biostatistics Conference Call
25 October 2005

Present on call: Laurel Beckett, Danielle Harvey, Qian Weng, John Kornak, Rob Croop

John reported on the voxel-based group. He just finished installing Matlab on his linux box and will be installing SPM so that he can begin to look at some of the Prep Phase data from the voxel-based group. He has a bullet point document that highlights some of the issues that the voxel group is dealing with as well as approaches for analyses. There has also been some email discussion about making sure that we compare approaches in a reasonable way, so that we don't fault a method for not dealing well in a particular context when it was not meant to be used in that context. He will try to add that discussion to his bullet point document and will then circulate it to the group before the next voxel based call.

Danielle is still working on her methodology paper for the distribution of white matter hyperintensities. She hopes to have everything done but the application to real data by the end of the week. Qian has done some simulations for the paper and they look good. We will be discussing the paper and simulations later this afternoon with Laurel. We have gotten some reviews back on Paul Thompson's paper from the Prep Phase. Paul is working on revising the manuscript and will be circulating the response to the reviewers as well as the modified manuscript in the coming weeks. It is unknown if other groups have been working on their Prep Phase papers; it seems as if the MRI core is caught up with the site qualification process, so energy is being spent on that rather than on writing the papers.

Danielle also reported on the summary information available on the ADCS ADNI website (detailed information on enrollment by diagnosis, by image type, age, education, etc.) 9 sites have provided information to ADCS, with a total of 15 patients enrolled (9 normal, 2 MCI, and 4 AD). According to the Exec Committee minutes, 15 sites have been qualified and by the end of November, it is hoped that about 30 sites will be qualified. The Exec Committee also decided to implement a block enrollment, due to higher enrollment of normals. Each site will be required to enroll 4 normal, 4 AD, and 8 MCI in a block (so that after 4 normals are enrolled, no more normals may be enrolled until the AD and MCI cells are fulfilled for that block.)

Although data is trickling in for the Exec Phase, there is a huge amount of data available from the Prep Phase, which we hope to use for further analyses and for testing of proposed analytic strategies.

With Rob on the call, we had the opportunity to talk with him about his perspective on a Workshop for the Industry folks. We are discussing the possibility of having a 2-day workshop in September 2006, most likely in Sacramento. This workshop will focus on accessing the data as well as on training in analytic techniques to be used with ADNI data. This workshop will emphasize cross-sectional techniques along with a look at some of the available longitudinal data. A follow-up workshop possibly in Spring 2007 would

focus on longitudinal techniques, since more data will be available by then. Rob will ask around to get suggestions on what would be useful to include in the various workshops.

It is our hope that there will be sharing of resources and ideas between the Biostat Core and the statisticians and researchers in Industry (within the restrictions of confidentiality, etc). Laurel is considering organizing a Session on Longitudinal Imaging Data for the 2007 Joint Statistical Meetings, which will highlight ADNI and bring perspectives from not only our group, but others working with the data. Also, thinking into the future, Laurel would like to have a Conference on "What We Have Learned" once ADNI winds up. We'd also like to look into further partnerships with other groups working with ADNI data and look into training grant opportunities to get students and post-docs interested in imaging data.

Laurel also mentioned Howie Rosen's add-on proposal to ADNI on FTLD, that our group is involved in. This study, if funded, would add FTLD subjects to those being followed through ADNI, which could also provide interesting information and challenges.