

SIX-MONTH RESEARCH GRANTS AWARDED IN JULY 2003

In keeping with its new more-targeted research goals, NAAF awarded six-month research grants this past July to Angela Christiano, Ph.D. (Associate Professor, Department of Dermatology and Genetics & Development, and Director of Research, Department of Dermatology, Columbia University), Amy McMichael, M.D. (Associate Professor, Department of Dermatology, Wake Forest University), and John Sundberg, D.V.M., Ph.D. (Senior Staff Scientist, The Jackson Laboratory).

Dr. Christiano hosts one of the five research centers for the National Alopecia Areata Registry, which is funded largely through a grant from the National

Institutes of Health (NIH). NAAF continues to fund additional genetics studies by Dr. Christiano not covered directly by the NIH grant. These studies have been progressing rapidly, mapping the genes underlying complex traits related to hair loss disorders using nonparametric linkage analysis methods. These studies are now at a critical stage; they are on the verge of pinpointing candidate genes that could respond to targeted treatment efforts.

Dr. McMichael is doing a preliminary study on the incidence of alopecia areata among people today. Such a study has not been undertaken for years. Without accurate incidence data, any population-

based research is fatally flawed. We hope that this study, which is using existing databases, can help answer initial questions regarding the current incidence of alopecia areata.

Dr. Sundberg is continuing his research on the "Creation, testing and distribution of multiple species alopecia areata tissue arrays." He and his affiliates are creating tissue arrays from humans and other species (including the mouse model) with alopecia areata as well as normal tissue. They plan on making these arrays accessible to the research community. They are identifying some of the earliest and possibly most important changes in alopecia areata and confirming these by various methodologies.

NEW 2004 NAAF RESEARCH GRANTS

This past December, the Peer Review Committee reviewed all 2004 grant applications for scientific merit and made its recommendations for funding. The Committee consists of Drs. John Ansel (Northwestern University), Ervin Lipstein, (University of California, San Francisco), JT Elder (University of Michigan), Sheri Bale (President of Gene DX, Inc), Steve Feldman (Wake Forest University) and Robert Lavker (Northwestern University). The NAAF Board of Directors reviewed the Committee's recommendations, analyzing them to make certain that they were in accord with NAAF's new research goals. Ultimately, grants were awarded to Nazila Barahmani, M.D., Angela Christiano, Ph.D., and John Sundberg D.V.M., Ph.D.

Dr. Barahmani believes that both environmental and genetic factors play a part in alopecia areata, and she hopes to better define the role of specific human leukocyte antigens (HLA) and cytokines in alopecia areata. She will be typing HLA genes and cytokines from DNA and serum samples collected by the National Alopecia

Areata Registry, and she will analyze their association with disease severity and environmental triggers. This information will further our understanding of the cause of alopecia areata and may lead to more effective treatments.

Dr. Christiano continues her quest to find the genes that make individuals susceptible to alopecia areata. Dr. Christiano will perform a genome-wide search for linkage from sibling pairs enrolled in the National Alopecia Areata Registry.

Dr. Sundberg will be studying the presence of an autoimmune regulator gene for alopecia areata. He will create new strains of mice that contain both the turned off autoimmune regulator gene and the susceptibility genes for alopecia areata. This should result in a new mouse model for alopecia areata that can be used for preclinical trials to evaluate new treatments for alopecia universalis. The current alopecia areata mouse model (C3H/HeJ) requires that a lot of mice be aged for more than a year and then only about 20 percent of these

mice develop alopecia areata. With the new strain of mice, Sundberg hopes to increase the number of mice that develop alopecia areata naturally and he hopes those mice will develop hair loss earlier in age. These results would also confirm the significance of the autoimmune regulator gene in alopecia areata.

SPECIAL NAAF GRANTS
TO STUDY THE DRUG
ALEFACEPT IN ALOPECIA
AREATA

NAAF is also funding several research studies to determine if the new drug alefacept might be of help in treating alopecia areata. These funds are going to Dr. Jerry Shapiro (University of British Columbia), Drs. Bruce Strober, Jerome Shupack, and Ken Washenik (New York University), Dr. Amy McMichael (Wake Forest University), and Jerry Krueger (University of Utah). NAAF will announce more information on its Web site as soon as related clinical trials receive approval from their respective university review boards.