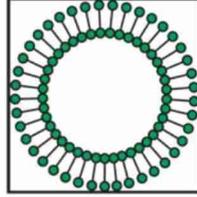


**CEO
CFO**



Avanti®
POLAR LIPIDS, INC.

Issue:
September 23, 2013

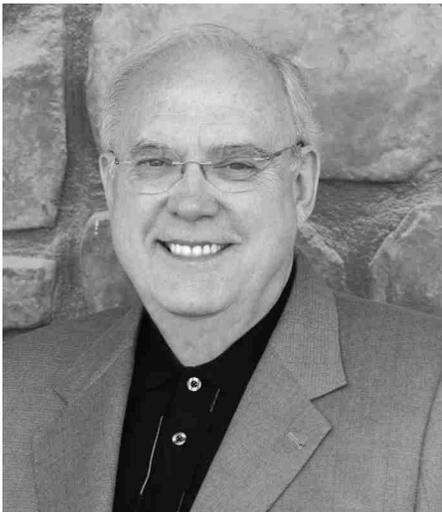
All rights reserved!
ceocfointerviews.com

CEOCFO Magazine - The Most Powerful Name In Corporate News and Information

**World Leader in the Exciting Science of Lipid Production and Analysis,
Avanti Polar Lipids, Inc. Supplies High Quality Lipids to Researchers
and the Pharmaceutical Industry in Over 40 Countries**

**Healthcare
Lipid Manufacturing**

**Avanti Polar Lipids, Inc.
700 Industrial Park Drive
Alabaster, Alabama 35007-9105
800-227-0651
www.avantilipids.com**



**Walter Shaw
CEO**

BIO: As the principal architect behind the unprecedented growth of Avanti Polar Lipids, Inc., Walter A. Shaw is widely recognized as one of the nation's leading authorities on lipid manufacturing, research and analysis. Since founding Avanti in 1969, Shaw has been instrumental in Avanti's ranking as the world leader in lipid production and analysis. Shaw's diverse knowledge of lipids was pivotal in the development of Avanti's extensive offering of specialized lipid products for research. It was Shaw's vision to provide the highest quality product available to researchers-- a vision

shared by all Avanti employees-- that earned Avanti its unique reputation for purity.

Shaw obtained a master's degree from The Ohio State University, and a doctorate from The University of Alabama at Birmingham. In addition to his role at the helm of an internationally recognized manufacturing company, Shaw served as Director of the Lipid Standards and Production Chemistry Core for the LIPID MAPS Initiative in Lipidomics. He has also served on several scientific advisory boards with universities and biotechnology companies. Shaw continually supports the scientific community through funding of meetings, symposia, and awards to recognize outstanding individuals in the area of lipid research.

About Avanti Polar Lipids, Inc.

Avanti Polar Lipids, Inc. is a "Fine Chemical Company" located in Alabaster, Alabama. Established in 1969 it is now clearly placed as the world leader in lipid production and lipid analysis. Avanti supplies lipids to researchers and to the pharmaceutical industry in over 40 countries. Lipids are a group of naturally occurring molecules that include fats and other compounds. The main biological functions of lipids include storing energy, signaling and acting as structural components of cell membranes. As the essential role of lipids in the functioning of cells has become clearer their importance to biological researchers has developed exponentially in recent years. This partly explains the spectacular growth that Avanti has enjoyed over the last 44 years. A bet-

ter understanding of the role of lipids in our lives and Avanti's contribution to this exciting science can be gained by visiting www.avantilipids.com.

**Interview conducted by:
Lynn Fosse, Senior Editor
CEOCFO Magazine**

CEOCFO: Mr. Shaw, what is the concept at Avanti Polar Lipids?

Mr. Shaw: We are about all kinds of lipids; phospholipids, sphingolipids, sterols, anything that is greasy in a biological application; we do.

CEOCFO: What are lipids? What does that encompass other than greasy things?

Mr. Shaw: There are several definitions. There are a multitude of compounds, so it is tough to describe "a lipid" as one compound. However, a common definition is; if it is soluble in chloroform it is a lipid. For instance, if you have a biological tissue and grind it up and put it in chloroform, what dissolves in the chloroform is a lipid. That is one crude definition.

CEOCFO: What are some of the uses for what you produce? There seems to be hundreds, thousands of versions. Would you give us a sense of the uses for the lipids?

Mr. Shaw: We sell lipids that are remanufactured for the biological research community. Many of these compounds have biological activity. Therefore, we will either isolate a compound from a natural source or we will synthesize a molecule that mimics what is in a natural source. When you interact this compound with a cell the compound will either turn

some biological system on or turn a biological system off. These are what is called a group of bioactive lipids. That is a growing field. As research and research tools expand new bioactive lipids are being found, constantly. In other applications, part of the lipid is polar; it likes water. The other part is non polar or hydrophobic and it hates water. Therefore, when you throw these compounds in water they will self assemble and organize in a way that the parts of the molecule that like the water are sticking out in the water and the hydrophobic part, the part that does not like water, is hidden. These self assembled vesicles are called liposomes or micelles. Therefore, you can trap things in the bilayer or you can trap things in an internal space and use these as delivery vehicles in biological systems. You may just want to study lipid – lipid interaction or you want to study lipid – protein interaction; all of these molecules lend themselves to biophysical applications of studying how a lipid interacts with another lipid or how that lipid interacts with a protein.

CEOFCFO: When a company comes to you do they know what they want and they just order catalog number “so and so” or do they tell you what they are trying to accomplish and ask you to provide what is appropriate?

Mr. Shaw: We have customers that have done research on the molecules, have written a patent and they know exactly what they want when they come to us. Most of these molecules would be a general type of lipid that we have in the catalog. We had a company that visited us last week that has an application. They came to us with a molecule that they had been purchasing. Therefore, we made suggestions to a synthetic version of that molecule and I think it is going to wind up that they are going to buy the synthetic version. We have lots of interaction with customers. That is really our specialty. We interact with customers, listen to what they need and make recommendations.

CEOFCFO: In general, are there times where the synthetic version is better or is it really case by case?

Mr. Shaw: Generally, the synthetic version is better. Very few times is the natural version the better application. One problem with natural compounds is variability from batch to batch, where you have consistency with the synthetic version. Also, in biological molecules, there are many molecules that are very similar. Therefore, to isolate that one specific molecule is challenging. Also, biological molecules have many types of isomers in them. You may have a compound called phosphatidylcholine that the customer wants to purchase, but that may contain fifty or one hundred different isomers in that one that is called phosphatidylcholine; whereas the synthetic version will only contain one isomer.

CEOFCFO: Are there many companies that specialize in lipids? What is the competitive landscape?

“We had been able to maintain the quality of these lipids from me making them by myself, to now we have one hundred and ten employees. We have been able to instill in these employees that quality is the absolute most important thing that they can do in a day. Therefore, quality is what we are all about.”

– Walter Shaw

Mr. Shaw: There are several companies that specialize in lipids. I think that we are the leader of that pack. We have been doing this since 1969. We have a lot of expertise and a lot of very dedicated customers.

CEOFCFO: What is the geographic reach?

Mr. Shaw: Worldwide.

CEOFCFO: Are there areas of the world where you would like to have greater inroads?

Mr. Shaw: Always.

CEOFCFO: Are there particular areas that you are focusing on or a particular plan in place?

Mr. Shaw: We have distributors all over the world and they do a great job. Getting products into certain parts of the world is more challenging than others. South America seems to be a challenge to get the products in. Most of our products require delivery on ice; either blue ice or dry ice, it is time sensitive. To get a product in an efficient manner to some countries is difficult.

CEOFCFO: How is business today?

Mr. Shaw: Business is good! We sell to the research market, which we have previously discussed. We also sell to the pharmaceutical market, where our product becomes part of the pharmaceutical drug; either as a bioactive reagent or as a carrier to their drug. We also do analytical services. Therefore, we have several facets of our company. When one is down the other one seems to be up.

CEOFCFO: That works out well.

Mr. Shaw: Yes, it does.

CEOFCFO: Are there areas or services that you would like to add that you are not providing now?

Mr. Shaw: We want to expand our area of lipid applications. Up until three years ago we supplied lipids that we would deliver to the customer and the customer would use the product. We started making applications for lipids that we could deliver, not only the lipid, but an application to the customer, so they could take our lipid that was in some sort of a kit that would facilitate their use. One of the areas that we have expanded is that we now make antibodies to lipids, so that researchers can use these antibodies to probe their biological systems with the antibodies to the lipids that are in their system. We print lipids on strips. These are called Snoopers™. The customer can then take his protein solutions and flow over these Snoopers that have the lipids printed on. We have developed ways of visualizing if a lipid is attracted to a protein in that protein solution. That is so the customer can tell if a protein that they have in their solution binds to a specific lipid. This is relatively new for us. We have put this out to

several customers and there are several publications that are already using this technology. We have also developed lipids that are bound to gold, so you can probe biological systems with this gold labeled lipid. The idea is that you could label the liposome and track that liposome by following the gold. We also have gold that is conjugated to reactive agents that bind in specific sites. Therefore if you have a compound that binds to a receptor you could use the gold to find out where that receptor and compound are.

CEO CFO: Are these innovations something that you develop; something that becomes a new industry standard? How do you decide what to add to the mix for the company?

Mr. Shaw: I do a lot of travelling. I probably attend fifteen meetings a year. These are anywhere from national meetings such as the Biophysical Society meeting; both the US Biophysical Society and the European Biophysical Society. There will be anywhere from a couple thousand to ten thousand people at these meetings. We have a booth and talk to customers. We learn what they

need and find out what their problems are. If they have any problems with our compounds we usually find out there. We get very good ideas and get productive collaborations with customers. We also attend and sponsor many small meetings that will have, maybe, one hundred to one hundred and fifty participants. These meetings are usually anywhere from three days to five days. You are in some site that is very nice and have a lot of free time. Usually, the format is lectures in the morning, the afternoon off and lectures in the evening. Therefore, you get to really mingle and talk to all of those people. Since it is a small group it is very focused and you get a lot of ideas from customers at those meetings. You take those ideas and distill them down. I come back to the business and then have the opportunity to discuss these projects with several people here. We come to a conclusion that “yes, we would like to move on this” and we move on it.

CEO CFO: You sound like the business is still very exciting for you. What is it still so exciting? What do you like about the lipid business?

Mr. Shaw: I really love lipids. Prior to my “lipid life” I have worked with carbohydrates and I have worked with proteins. There just was not that spark there. I started working with lipids and you could talk about falling in love with a compound – I fell in love with lipids! That passion has continued to this day!

CEO CFO: Why should investors and people in the business community pay attention to Avanti? Why is Avanti Polar Lipids an exceptional company?

Mr. Shaw: The company started out with me and my graduate project which was a phospholipase assay. I made lipid substrate for the assay. At that point you could not purchase lipids of the quality to do the work, so I made the lipids; of very high quality. We had been able to maintain the quality of these lipids from me making them by myself, to now we have one hundred and ten employees. We have been able to instill in these employees that quality is the absolute most important thing that they can do in a day. Therefore, quality is what we are all about.



Avanti Polar Lipids, Inc.

**700 Industrial Park Drive
Alabaster, Alabama 35007-9105
800-227-0651
www.avantilipids.com**