## UNITED STATES DISTRICT COURT NORTHERN DISTRICT OF ALABAMA Southern Division

In re:			)
	)		
SILICONE GEL BREAST IMPLANTS	)	Case No. CV 92-P-10000-S	
PRODUCTS LIABILITY LITIGATION	)		
(MDL 926)		)	

# ORDER 31L (Denying Plaintiffs' "Motion for Relief from Prejudicial Bias")

On April 13, 1999, the Plaintiffs' Steering Committee (PSC) moved to vacate the court's appointment of Dr. Peter Tugwell as an expert witness under Fed. R. Evid. 706, as well as to vacate the Rule 706 appointments of the other three experts who have been serving on the "National Science Panel." Prompted primarily by information obtained during a discovery deposition of Dr. Tugwell on February 6, 1999, the motion incorporates additional information obtained after that date (including testimony from Dr. Peter Tugwell and Dr. George Wells during supplemental discovery depositions taken on April 5, 1999).

The PSC's allegations of bias, conflict of interest, or improper conduct on the part of Dr. Tugwell involve the following:

- 1. His roleCbefore and after appointmentCas an organizer of and fund-raiser for OMERACT conferences. Included among the many companies, institutions, and organizations that have provided financial support for these conferences are 3M Pharma Canada, Inc., and Bristol-Myers Squibb.
- 2. His relianceCwhile performing services as a court-appointed expertCon the assistance of a colleague, Dr. George Wells. A separate project on which Dr Wells has worked has been funded by Zimmer Canada Ltd., a Bristol-Myers subsidiary.
- 3. Before completing his work as a court-appointed expert, his participation in a half-day meeting arranged by Bristol-Myers (for which he was personally paid \$750) and his agreeing to participate in Canadian clinical trials of two Bristol-Myers products.

<sup>1.</sup> Since the court finds that the work of Dr. Tugwell as a court-appointed expert has been impartial, unbiased, neutral, objective, and unaffected by any relationship or contact with the defendants, the PSC's challenge of the other three court-appointed experts is clearly without merit.

On April 19, 1999, after receiving responses from the defendants and from special counsel for Dr. Tugwell and after considering oral arguments, the court announced that it was denying the PSC's motion and that it would explain in greater detail the basis for that decision through a subsequent written opinion. At the outset of this opinion, the court reiterates its findings, orally announced on April 19th, that the matters recited by the PSCCwhich for the most part are without factual disputeChave not in fact affected or influenced Dr. Tugwell's work as a court-appointed expert, that he has not had and does not have a conflict of interest or bias, and that throughout his service he has acted neutrally, objectively, and impartially. The only troublesome issues presented by the motion are what can be described as problems of "appearance"Ca matter that can be explored only through a rather detailed statement of what has occurred.

Before the court made its appointments under Fed. R. Evid. 706, several inquiries were made to the nominees, not only about their professional qualifications and experience, but also about possible areas of bias or conflicts of interest. The sequence of these inquiries with respect to Dr. Tugwell was as follows:

- \$ in June 1996 a preliminary inquiry was made by Dr. Wolf of the court-appointed Selection Panel as to Dr. Tugwell's interest in serving on the panel, coupled with a brief inquiry about possible conflicts
- \$ in July 1996 a detailed multi-page written Questionnaire relating to possible biases and conflicts was signed by Dr. Tugwell and returned to Dr. Wolf
- \$ in August 1996, after Dr. Tugwell had been unanimously recommended by the full Selection Panel, additional questions were presented orally to him by representatives of the parties during a telephone conference call in which the court also participated
- \$ in August 1996 some supplemental materials, including a list of sources of seventeen funded projects in the preceding five years, were then submitted by him in response to requests made by the parties during that conference call. Dr. Tugwell indicated his willingness to provided more detailed information about these grants if requested

As indicated, the written and oral responses of Dr. Tugwell (as well as of the other two

other experts being considered at that time for appointment) were discussed with the parties prior to any appointments being made. The PSC expressed a general concern, applicable to all nominees, that direct or indirect funding of research projects by pharmaceutical companies created questions of bias, conflict, or at least the appearance of bias or conflict. In the court's view, adoption of the PSC's position would, in essence, have precluded consideration of a substantial proportion of academicians, who were perhaps the persons most qualified to provide valid and reliable opinions needed to address the difficult issues to be put to the Panel.

The court rejected the PSC's contentions. It then concludedCand it continues to believeCthat the fact that non-breast-implant research by an individual (or by a colleague in his or her university department) may have been funded by contributions from a manufacturer of breast implants or raw materials does not necessarily disqualify that person from serving as a court-appointed expert on this panel. The court concludedCand it continues to believeCthat a scientist can act neutrally and objectively in conducting research even if the outcome of that study may adversely affect some company that has been or potentially may be a source of funding for other research or activities. The more remote and the less substantial in amount the past or potential financial support from such a company, the less justified is any inference that the research will be affected or influenced by such considerations.

#### **OMERACT CONFERENCES**

Since the formation of OMERACT<sup>2</sup> in the early 1990s, Dr. Tugwell has been one of its key organizers and fund-raisers. Dr. Tugwell has not received any compensation from OMERACT for this work, nor has he personally benefitted from any contributions that have funded these conferences.

The principal activity of OMERACT has been to sponsor four biennial meetings of

<sup>2.</sup> The acronym was based on the subject matter of the first meeting, namely, "Outcome Measures in Rheumatoid Arthritis Clinical Trials." The topic of more recent meetings has been broadened to "Outcome Measures in Rheumatology," but the acronym has remained the same.

professionals from around the world who are interested in clinical trials, including representatives of regulatory agencies, to consider mutual concerns regarding appropriate measures of rheumatologic conditions when conducting clinical trials. These conferences have been endorsed by the World Health Organization and the International League of Associations for Rheumatology, with the proceedings of each conference being reported in the Journal of Rheumatology. At none of the conferences have issues relating to breast implants been a topic of discussion.

Upon first being asked by Dr. Wolf about connections with any of the identified parties, Dr. TugwellCwhile characterizing this as "a very distant link"Cadvised that 3M (actually it was 3M Pharma Canada, Inc.), among some twenty governmental agencies, institutions, and pharmaceutical companies, had provided \$5,000 in support of OMERACT meetings. He repeated this same information in subsequent pre-appointment disclosures, and this information was shared with representatives of the parties. After hearing from the parties, the court concluded that this funding would not affect Dr. Tugwell's participation as a neutral, objective court-appointed expert relating to silicone breast-implant questions. The court remains convinced that this was a correct conclusion.

At his discovery deposition, held in early February 1999 after the Panel's Report had been submitted, Dr. Tugwell, when asked about funding of the OMERACT activities, replied, in essence, that he stood by his pre-appointment answers in that "Bristol-Myers" had provided financial support. This discrepancyCbetween his actual pre-appointment answers (identifying 3M as a contributor) and his deposition answer (identifying Bristol-Myers as a contributor)Cled to intensive post-deposition investigation into the funding sources for OMERACT activities, as well as other possible relationships with the defendants. Based on these reviews, it now appears that both 3M Pharma Canada, Inc. (to the extent of \$5,000 in connection with the 1994 OMERACT II conference) and Bristol-Myers Squibb (to the extent of \$500 in connection with the 1996

OMERACT 3 conference) have provided financial support for OMERACT conferences. These are apparently the only contributions from any of the implant manufacturers or their affiliates.

The Selection Panel had viewed the \$5,000 contribution by 3M in helping to support the OMERACT conferences as inconsequential, not affecting Dr. Tugwell's objectivity or his ability to serve impartially on the Science Panel, and the court had agreed. Had the \$500 contribution from Bristol-Myer also been disclosed at that time, the court would have reached the same conclusion.

Nor is there any basis for believing that the failure to list this contribution represented any attempt on Dr. Tugwell's part to conceal the contribution. It appears that, during the period when Dr Tugwell was being asked by Dr. Wolf, by the court, and by the parties about possible conflicts, he had the funding details for only the first two meetings.<sup>/3</sup>

The PSC has argued that, apart from disclosing only \$5,000 of the \$5,500 in OMERACT funding received from defendants, Dr. Tugwell engaged in improper activities by including, after appointment to the Science Panel, Bristol-Myers in the list of those from whom financial support was solicited over his signature for subsequent OMERACT conferences. However, it should be noted that (1) the court had, by appointing Dr. Tugwell, already in essence concluded that manufacturer support for OMERACT conferences did not affect Dr. Tugwell's service as a court-appointed expert, and (2) the court, in Orders 31D, 31F, and 31H entered shortly after appointment of these four experts to the National Science Panel, had prohibited communications between panelists and litigants on matters related to breast implants, but had not placed any restrictions on communications unrelated to breast implants. This distinction was deliberate; namely that, in recognition that the panelists' work on the Panel would be only one of their many professional activities, they should not be unnecessarily restricted by preventing them from routine contacts with pharmaceutical companies in performing activities unrelated to issues involved in breast implant litigation.<sup>74</sup>

<sup>3.</sup> The listing of acknowledgments for the 1996 meeting was not published until 1997.

<sup>4.</sup> In hindsight, the court should probably also have precluded any solicitation by a panelist of funds from the

Dr. Tugwell's beliefCthat the court had given clearance for his continued work on behalf of OMERACT, including solicitation of fundsCwas both understandable and reasonable. His post-appointment solicitation of Bristol-Myers for funding of subsequent OMERACT conferences is not a basis for disqualifying him from continuing to serve as a court-appointed expert under Fed. R. Evid. 706.

#### ASSISTANCE FROM DR. GEORGE WELLS

Dr. George Wells, a colleague of Dr. Tugwell, is a Professor in the Department of Medicine at the University of Ottawa and is the Associate Director of the Clinical Epidemiological Unit of the Loeb Health Research Institute at Ottawa Hospital. The two have worked closely together over the years on a variety of projects and on several occasions have co-authored published studies. Because of his special expertise in biostatistics, Wells was asked to assist Dr. Tugwell in connection with Tugwell's work on the National Science Panel. Like Dr. Tugwell, he had not, prior to that time, done any research or other work involving silicone breast implants.

Substantial work has been done for Dr. Tugwell by Dr. WellsCprimarily on statistical matters and related topics, such as screening articles for possible statistical evaluationCand it is clear that Dr. Tugwell has viewed Wells as an "integral" part of his "team." The PSC's motion asserts that this was improper, at least in appearance, in view of certain other activities by Dr. Wells both before and during the period of the Panel's work.

defendants, even for activities wholly unrelated to breast implants. The basic problem is that a defendant receiving such a solicitation (if the recipients are aware of the person's participation on the panel) can be put in an awkward situation. The defendant may worry that the soliciting panelist might be offended if does not make a contribution. On the other hand, if a contribution is madeCeven when motivated solely by a legitimate desire to support the project and not by any concern as to the reaction of the soliciting panelist should no contribution be madeCthe question can be raised whether this might be viewed as attempting to curry favor with the panelist. In the present case, it is unclear whether or not the recipients of the solicitation to Bristol-Myers were aware of Dr. Tugwell's participation on the Panel. In any event, Bristol-Myers did not make a contribution in response to the solicitation, and the court is not here confronted with any assertion that this failure caused some bias against Bristol-Myers.

<sup>5.</sup> Dr. Wells was actually engaged as a special consultant to the Special Counsel for the members of the National Science Panel and would have been available to provide statistical advice for all members of the Panel if requested. In fact, only Dr. Tugwell utilized the services of Dr. Wells, and Wells did not communicate with other panelists (though he did listen to certain telephonic discussions Tugwell had with other panelists).

The first part of the PSC's complaint is based on the fact that since 1993 Dr. Wells has been involved, as a biostatistician, as part of a group from Loeb Health Research Institute in a clinical trial of an artificial metal hip prosthesis. The PSC notes that over the last 6 years the Institute has received some \$200,000-250,000 (Canadian) in cost-recovery for the work by various members of the group on this project Cthese funds having been paid by Zimmer Canada Ltd., a wholly-owned subsidiary of Bristol-Myers. To place this matter in context, however, it should be also noted that Wells is not the principal investigator for the project (which has nothing to do with breast implants), that he has not received or reviewed any correspondence from Zimmer and only twice has had any contact with Zimmer, and that he has not personally received any remuneration for his work.

What is more significant is that not until February or March 1999Cseveral months after Tugwell had stated his opinions in the Report of the National Science PanelCdid either he or Dr. Tugwell become aware that Zimmer was itself involved in breast implant litigation or, indeed, was affiliated with Bristol-Myers. This is not surprising. Zimmer was not one of the thirty-nine companies included on the list of defendants sent by Dr. Wolf to Dr. Tugwell. Zimmer has never been viewed as one of the major defendants in the breast implant litigation. Indeed, when the issue concerning Zimmer arose earlier this year, the courtCdespite almost daily involvement in pretrial management of this litigationCdid not remember that Zimmer was in any way involved and had to review pleadings and orders to ascertain that, in fact, Zimmer had been named in many cases as one of the numerous defendants sued.

The second part of the PSC's complaint relates to the fact that in 1994 Dr. Wells accepted an appointment by Health CanadaCa governmental agency of Canada somewhat similar to the

<sup>6.</sup> Dr. Tugwell has not been involved in this project.

<sup>7.</sup> The only significance of this fact is that the PSC has noted that Zimmer's letterhead reflects that it is a "A Bristol-Myers Squibb Company."

<sup>8.</sup> The list did not include all companies that had been named as a defendant in the thousands of cases that had been filed, and made no effort to list all affiliates of the thirty-nine principal defendants so listed.

U.S. Food and Drug AdministrationCto serve as one of six or seven members of a special breast implant advisory committee. Wells was not compensated directly (or indirectly through an institutional payment) for his limited services on this Committee. His last involvement with this now-defunct group was in January 1995, when its last meeting was held. Pharmaceutical companies did not fund the activities of the Committee, nor was there any representative from industry on the Committee. What is most significant to the motion before the court is that the Committee was formed to consider issues that might arise with respect to saline breast implants and that, so far as Dr. Wells can recall, there was no discussion in the few meetings of the Committee of silicone breast implants. In short, Wells'swork on this Advisory Committee did not in any way affect the appropriateness of his providing assistance to Dr. Tugwell as a court-appointed expert in this litigation.<sup>9</sup>

The court concludes that there was nothing improper in Dr. Tugwell's use of Dr. Wells'sservices in performing his work as a court-appointed expert, and that his use of these services did not impair Dr. Tugwell's objectivity, impartiality, or neutrality and did not result in any bias, conflict of interest, or, when the facts are known, any appearance of bias or conflict of interest.

### RELATIONSHIP WITH BRISTOL-MYERS

In mid-September 1998, Dr. Tugwell was contacted by Dr. Becker<sup>/10</sup> of Bristol-Myers about possible participation in a company-sponsored discussion of rheumatoid arthritis that would be held in conjunction with an upcoming meeting of the American College of Rheumatology in San Diego. This half-day meeting was to be held in November 1998, after Tugwell expected to have completed his portion of the National Science Panel's report. The topic to be discussed related to therapies for rheumatoid arthritisCa matter unrelated to breast implants, which have

<sup>9.</sup> Although not particularly significant, it appears that Dr. Tugwell did not even know of Wells'sparticipation on this Committee until 1999, after Wells'sservices to Tugwell on the National Science Panel had essentially been completed.

10. Dr. Becker, from France, had known Dr. Tugwell through professional meetings for a number of years.

never been claimed to act as a therapeutic agent. On September 30th, Tugwell's secretary responded by email that he would accept the invitation.

On October 13th, Dr. Mase<sup>/11</sup> from Bristol-Myers sent to Dr. Tugwell a letter confirming this participation and enclosing a "Confidentiality Agreement" for his signature. This agreement, in the form of a letter outlining terms for consulting services (at a rate of \$1,500 per day), was signed by Tugwell on November 4, 1998.<sup>/12</sup> Dr. Tugwell participated in this meeting, along with eight other outside experts similarly so engaged. The meeting lasted from about 4:30 to 8:00 p.m. on November 8, 1998, and, as anticipated by Dr. Tugwell, did not involve any issues related to breast implants. On December 15th, he was sent a check for \$750, referred to as an honorarium, a part of which actually constituted a reimbursement for extra expenses incurred by him in having to arrive at the ACR conference a day early.

Since the discussion did not involve breast implants, Dr. Tugwell believed that, under the earlier directions from the court, his participation presented no problems regarding his service as a court-appointed expert related to breast implants. Nor is there a basis for believing that Bristol-Myers was attempting to influence Dr. Tugwell's work as a court-appointed expert by asking him to participate in this meeting or in making the \$750 payment to him. Drs. Becker and Mase, the individuals acting on behalf of Bristol-Myers in connection with this meeting, had been first employed by Bristol-Myers only in the Spring of 1998Cabout six years after Bristol-Myers had ceased manufacturing breast implants. Becker and Mase were unaware both of Tugwell's role as a court-appointed expert and also of Bristol-Myers's being a major defendant in breast implant litigation. This latter fact may seem strange to those of us who have been consumed by breast implant litigation for years, but the reality is that what has dominated our lives is a matter that has

<sup>11.</sup> Dr. Mase had not known Dr. Tugwell; she had received Tugwell's name from Dr. Becker.

<sup>12.</sup> The PSC emphasizes that the terms of this agreementCapparently generated by Bristol-Myers from some standard form regularly used by it for consulting servicesCestablished some ongoing relationship that would continue until terminated by either party on thirty days' notice. It is clear, however, that both Tugwell and Bristol-Myers understood it to relate solely to this half-day meeting in San Diego.

been of little interest or consequence to a large part of the population, even many in the scientific community.

The PSC notes that two items on the pre-appointment Conflict Questionnaire mailed in July 1996 by Dr. Wolf of the Selection Panel would have called for disclosure of information about the San Diego meeting if it had occurred before that date. The PSC argues that, when the meeting did occur in November 1998, Dr. Tugwell then had an affirmative obligation to report this information to the court and the parties in view of a statement on the Questionnaire that read "Promptly report to the Selection Panel any changes or additions to the information reported on this form while you are either being considered for service on the Science Panel or while serving on the Panel."

There are several problems with the PSC's thesis. First, the Selection Panel had ceased to exist many months before November 1998. Second, it was clear that, after the appointments were made, the panelists were to be governed by the court's instructions and orders. Third, there is no prejudice to the PSC as a result of a few months delay in learning this information.

On December 15, 1998, Dr. Tugwell's secretary was contacted by Dr. Dulude of Bristol-Myers Squibb Pharmaceutical Group (BMSPG), a Canadian affiliate of Bristol-Myers, about possible participation as one of a number of Canadian clinical investigators for a study involving two products for potential therapeutic use with rheumatoid arthritis. Dulude, who had no knowledge of Tugwell's involvement in breast implant issues, <sup>14</sup> forwarded to Tugwell a questionnaire. Dr. Tugwell, who was interested in Ottowa being a clinical site, returned the questionnaire on January 4, 1999. By letter of January 6, 1999, Dulude sent Tugwell a "confidentiality disclosure agreement" relating to proprietary information relating to the study

<sup>13.</sup> The court does acknowledge, in hindsight, that it should have required the experts while serving on the Panel to report any agreements to provide consulting services to a party or payment received from a party, even on matters unrelated to breast implants.

<sup>14.</sup> Dr. Dulude had gotten Tugwell's name from Dr. Becker, apparently based on Tugwell's participation in the San Diego meeting the preceding month.

<sup>15.</sup> It may be noted that this agreement, unlike the one that had been signed relating to the November meeting in San Diego, was not an agreement to provide consulting services, and only related to the confidentiality of proprietary

that Tugwell would receive from BMSPG before confirming his interest in serving as one of the clinical investigators.

Later in January1999, after having signed the confidentiality agreement, Dr. Tugwell advised Dulude that, because of other time demands, he was declining to act as a clinical investigator. He suggested that Dr. Robert McKendry, a colleague at the University, might be an appropriate investigator at the Ottowa site. Subsequently BMSPG contacted McKendry and later entered into an agreement with him as a clinical investigator.

To summarize, Dr. Tugwell was contacted by BMSPG about becoming one of many Canadian investigators on a clinical study of two therapies that had nothing to do with breast implants. This was in December 1998Cafter Tugwell's opinions regarding breast implants had been expressed through submission of the Report of the National Science PanelCand the contact was initiated by a researcher at BMSPG who knew nothing about Tugwell's participation on the Panel. Dr. Tugwell was interested in the University of Ottowa's being one of the sites for the investigation. He never agreed to be an investigator, but did recommend a colleague at the University, who ultimately agreed to act as an investigator.

One other contact between Bristol-Myers and Dr. Tugwell should be mentioned. At some point during January or February 1999, apparently as a follow-up from some discussion at the San Diego meeting, Dr. Becker talked to Dr. Tugwell about possibly participating on a Safety Monitoring Board. This conversation was apparently brief, preliminary in nature, and did not lead to Dr. Tugwell's becoming a member of any such Board.

The court concludes that Dr. Tugwell's neutrality, objectivity, and impartiality while serving as a court-appointed expert have not in fact been impaired by his participation in the Bristol-Myers San Diego meeting or by his interest in perhaps serving as a clinical investigator for a Bristol-Myers therapeutic product. Nor did these contacts in late 1998 and early 1999 have any

information expected to be sent to Dr. Tugwell.

effect or influence on his opinions as a court-appointed expert, or give rise to any actual bias or conflict of interest..

#### STANDARDS FOR CONSIDERING "APPEARANCE"

The question remains, however, whether, under the rubric of an alleged "appearance" of bias or conflict, Dr. Tugwell's further participation as a court-appointed expert should be vacated. The PSC is correct when it says that the court, when considering nominees for appointment under Rule 706, was interested not just in actual bias or conflict, but also in matters that might give rise to some question of the appearance of bias or conflict.

The PSC has posed this interesting question: would the court have appointed Dr. Tugwell if, hypothetically, in the summer of 1996 he had reported that, although not involving breast implants, he had already committed to participating in November 1998 in a Bristol-Myers sponsored meeting for which he would be paid \$750 and would be discussing with Bristol-Myers companies his potential participation as a clinical investigator or perhaps service on a Medical Safety Board? While an answer is necessarily problematic, the courtCgiven its desire to avoid all controversy about the panelistsCwould probably have called on the Selection Panel to search for additional rheumatologists who, along with Dr. Tugwell, should be considered for appointment.

But this is not the issue with which the court is now confronted. The question is whetherCwith Dr. Tugwell's having been appointed and having served impartially, neutrally, and objectively on the Panel for over two yearsChe should be removed on the basis of some alleged "appearance" of impropriety. No matter what decisions are looked to for guidance, it is clear that issues relating to possible questions of "appearance" should resolved by considering all of the relevant facts, not just those selected by a party to support its position.

There are relatively few cases that have addressed the issue of appointment or removal of an expert witness under Rule 706. Many of the authorities cited by the PSC are cases involving

disqualification or recusal of judges, or attacks upon decisions of arbitrators or jurors. These cases, while perhaps useful in providing some insights, are not, however, apposite. They involve persons who are the ultimate fact-finders or decision-makers in the case. The rules governing disqualification or recusal of federal judges, indeed, are provided by statutes that, in part, can be viewed as Draconian and absurdCto cite an extreme example, disqualification of a judge because, several years after a case has been in litigation, it is discovered that the spouse of the judge's nephew owns one share of stock in a company that is a party to the litigation.

Somewhat more analogous are cases involving challenges to Masters<sup>16</sup> appointed under Fed. R. Civ. P. 53. In non-jury cases, their findings are to be accepted by the court unless clearly erroneous. In jury cases, their findings are simply admissible as evidence along with the evidence presented by the parties and not entitled to any special weight or presumptive effect; even so, the parties have no opportunity to discredit those findings through cross-examination of the Master.

On the other hand, cases cited by the defendants involving party-employed expert witnesses are of little help except to demonstrate the role of cross-examination.

Expert witness appointed by the court under Fed. R. Civ. P. 706 are intended to be just that Cpersons who will testify as witnesses about their opinions on scientific, technical or other specialized matters in order to "assist the trier of fact to understand the evidence or to determine a fact in issue." Under Rule 706 they are Cas Dr. Tugwell has twice been Csubject to being deposed by the parties and then, for their trial testimony, they are Cas Dr. Tugwell will be Csubject to cross-examination by the parties. Their testimony, which does not preclude testimony from experts employed and called by the parties, is not entitled to any special weight, and whether the jury is even informed of the fact of court-appointment is a matter of discretion for the trial judge.

This court, after extensive review, has found as a fact that the matters raised by the PSC,

<sup>16.</sup> Some of the cases relating to Masters do not involve persons acting in accord with Rule 53, but rather persons performing other specialized functions on behalf of the court, frequently in the enforcement of injunctive decrees.

considered singly and in combination, have not affected or influenced Dr. Tugwell's opinions, have not created any bias or conflict of interest, and have not impaired his neutrality, objectivity, or impartiality. This finding, made for the purpose of ruling on the PSC's motion, does not, however, mean that any inquiry into these matters on cross-examination would, as a matter of law, be irrelevant or impermissible, even if personally offensive to Dr. Tugwell. On the other hand, the focus of any cross-examination of Dr. Tugwell should certainly be directed to the opinions he has reached and the bases for those opinions.

One last observation can be made. The questions raised by the PSC's motion, and indeed the examinations of the other three experts which have already been conducted, indicate perhaps some cultural chasm, when considering scientific research, between the approach of those in the scientific community and that of those involved in litigation. It appears that the approach of scientists is to critique research largely confined to the four corners of the reported research; "ad hominem" considerations directed at the individuals involved in that research generally are to be disregarded and may be viewed as inappropriate attacks upon the integrity of those individuals. On the other hand, the approach of those involved in litigation, at least in this country's adversarial system, tends to be one of skepticism and distrust, ready to consider possible motivations and influences that may have affected, even subconsciously, the conduct or conclusions of a study or, indeed, even the reported observations upon which the study is based.

This attitudinal difference, if the court is correct in its assessment, can produce some dysfunction when, as here, persons from the scientific community with little or no experience in litigation are co-opted into the legal system via court-appointment under Rule 706. This is a matter that deserves greater consideration and exploration as persons from both perspectives consider further use of Rule 706. Certainly this court, on reflection, sees that more detailed instructions as to what should and should not be permitted while a scientist serves as a court-appointed expert would have been desirable in bridging the gap.

For the reasons stated, the PSC's motion has been denied.
This the 25th day of April, 1999.
/s/ Sam C. Pointer, Jr.

Chief Judge