Dunn, Peter E.

From:

Adams, Holly [Holly_Adams@onr.navy.mil]

Sent:

Friday, May 25, 2007 9:05 AM

To:

Dunn, Peter E.

Subject:

RE: Questions regarding allegations

Dear Dr. Dunn,

I apologize for the delay in responding to your email, and appreciate that you are asking detailed questions in your effort to get to the bottom of these allegations.

However, I am not the right person to ask. As the IG of the the awarding agency, I receive and refer allegations of this nature to the appropriate institution. The institution contacts witnesses and gathers information during the course of their inquiry.

I have provided, to you, the evidence that I had gathered and a list of potential witnesses with their contact information. You should be able to get answers to the questions, below, from witnesses on that list.

If you have questions, please do not hesitate to call me at 703-696-0989.

v/r

Holly Adams Inspector General Office of Naval Research

----Original Message----

From: Dunn, Peter E. [mailto:pedunn@purdue.edu]

Sent: Tuesday, May 15, 2007 3:17 PM

To: Adams, Holly

Cc: Rutledge, Charles O.

Subject: Questions regarding allegations

Dear Ms. Adams,

On behalf of Purdue University's Inquiry Committee reviewing allegations transmitted in your message of March 29, 2007, I am transmitting the following comments and request for additional clarification written by the Committee.

Thank you for your continuing assistance in this matter. I look forward to receiving any additional information you can provide.

Sincerely,

Peter E. Dunn, Ph.D.

Associate Vice President for Research

Research Integrity Officer

Purdue University has received a list of scientific research misconduct allegations from your office. An Inquiry Committee (IC) has been appointed following Purdue procedures. The IC is charged with evaluating the available evidence to make a determination as to whether a full investigation is warranted. We must distinguish physical evidence and direct observation by witnesses from suspicion. In the case of direct observation, we must identify the witnesses. Without such specific information, it is difficult to conduct an inquiry of that allegation, since hearsay and opinion often become confused with provable facts. The purpose of this letter is to request additional detailed information from those making anonymous allegations so that the IC can better focus its attention on specific facts or observations as the basis for inquiry.

In what follows, we list the allegations in your email dated March 29, 2007 and sent to Vice President Charles O. Rutledge. Since the written allegations were not numbered or delimited in a clear way, we take the liberty to number them in sequential order, employing the same numbering scheme used by Charles Rutledge in his e-mail response to you, dated March 30th, 2007. The specific questions posed by the IC are listed after allegations 1-5, 7 and 9 below. We provide a short summary of our understanding of each allegation based on our reading of the literature you have provided.

- 1. It is alleged that "...Dr. Taleyarkhan showed bubble fusion research data to DARPA in May 2005 (in the paper Multiphase Science and Technology (MST) and slideshow in one scientific context, and showed identical data to Nuclear Engineering and Design (NED) and Nureth-11 in a different scientific context. Dr. Taleyarkhan was allegedly (wrongfully) presenting same results as outcome(s) of different experiments."
- a. This allegation is vague in its wording, especially with respect to the meaning of the phrase "scientific context." Is this allegation any broader or different from the Reich PowerPoint presentation at pages 96-106 of the ONR supporting material transmission dated 4 April 2007?
- 2. It is alleged that "...Dr. Taleyarkhan wrongly and deliberately, used Cf252 in order to duplicate research data (approximately six times), data that he published as a fusion signal. In other words, it is alleged that Dr. Taleyarkhan used Cf252 to fabricate and/or falsify his bubble fusion replication results."
- a. Please identify the six occasions when Cf252 was allegedly used by publication or presentation.
- b. For each identified publication or presentation, state how the Cf252 source was used to fabricate or falsify the bubble fusion result, and identify the witnesses.
- c. Is this allegation broader or different than the contentions published by Dr. Naranjo regarding Cf252?
- 3. It is alleged that "In his published response to a forensic analysis by Dr.Brian Narango in PRL v97p149404, Dr. Taleyarkhan claims to show the same fusion data but, allegedly, actually deleted some of his originally published research results data on fusion signal."
 - a. What is the scientific significance of the data

- b. How is the deletion misleading?
- 4. It is alleged that "...at the bubble fusion demonstration at Purdue on March 1, 2006, Dr. Taleyarkhan allegedly committed acts of scientific research misconduct, witnessed by guest scientists and officials."
- a. We note that no specific allegations of research misconduct were made in the referenced news accounts of the demonstration.
- b. Please confirm that the March 1, 2006 demonstration was attended by Bill Coblenz of DARPA, Peter Schmidt of ONR, Seth Putterman of UCLA, and Ken Suslick of the University of Illinois. Please identify any other persons in attendance.
- c. Presumably ONR and DARPA have e-mail and/or other records (such as trip memos and grant reports) relating to the March 1 demonstration. Please describe any such documentation and indicate whether it is available for our review.
- 5. It is alleged that "...Dr. Taleyarkhan was federally funded for his Physical Review Letters (PRL) paper, and has since allegedly claimed he was not."
- a. What evidence can be offered to support the claim that the source of funds for expenditures related to the specific work reported in PRL were in fact from Federal agencies?
- b. When and where did Taleyarkhan claim he was not federally funded for the work reported in the PRL article?
- 7. It is alleged that "...Dr. Taleyarkhan reported fabricated and/or falsified information in a 2006 publication."
- a. What is the specific 2006 publication referenced?
- b. What specific data were fabricated and/or falsified in the 2006 publication?
- c. What evidence supports the specific claim of deliberate fabrication and/or falsification?
- 8. It is alleged that "Dr. Taleyarkhan's work as it applies to the research described and appearing in Physical Review Letters 96, 034301 (2006) has been federally funded (ONR awarded grant to UCLA)."

As per the e-mail correspondence between you and Peter Dunn (see message from you to Peter Dunn on April 12th, 2007), this allegation is not distinct from allegation #5.

9. It is alleged that "In January 2006, after spectrum analysis was conducted allegedly proving his use of Cf252, Dr. Taleyarkhan published further fabricated and/or false scientific statements in his PRL: "Introduction.-Previously, we have provided evidence [1(a), 2-4] for 2.45 MeV neutron emission and tritium production during external neutron-seeded cavitation experiments with chilled deuterated acetone, and these observations have now been independently confirmed [5]"

We note again that only one of the cited publications referenced in the allegation involved research conducted at Purdue, and this work appears to have been performed prior to the initiation of DARPA funding in 2005.

Furthermore, this paper was the subject of a prior inquiry at Purdue.
We believe that you have now seen the report from the previous inquiry.
Please confirm that you now agree that this allegation has already been addressed in the previous inquiry. We do not plan to pursue this allegation unless we are informed that the scope of this allegation is broadened to include research conducted at Purdue that was not included in the prior inquiry.

Thank you for your continuing assistance.