

1 Dan Stormer, Esq. (S.B. #101967)  
Cindy Pánuco, Esq. (S.B. #266921)  
2 HADSELL STORMER & RENICK LLP  
128 N. Fair Oaks Avenue  
3 Pasadena, CA 91103  
Telephone: (626) 585-9600  
4 Facsimile: (626) 577-7079  
dstormer@hadsellstormer.com  
5 cpanuco@hadsellstormer.com

6 Lynne Bernabei, Esq. (DC Bar #938936)  
(motion to appear *pro hac vice* forthcoming)  
7 Karen Tanenbaum, Esq. (DC Bar #1012808)  
(motion to appear *pro hac vice* forthcoming)  
8 BERNABEI & WACHTEL PLLC  
1775 T Street, N.W.  
9 Washington, D.C. 20009  
Telephone: (202) 745-1942 / Facsimile: (202) 745-2627  
10 bernabei@bernabeipllc.com  
tanenbaum@bernabeipllc.com

11 Attorneys for Plaintiff/Petitioner SANDRA M. TROIAN

CONFORMED COPY  
OF ORIGINAL FILED  
Los Angeles Superior Court

NOV 13 2014

Sherri R. Carter, Executive Officer/Clerk  
By: Moses Soto, Deputy

D-82  
Luis A.  
LAVIN

12  
13 SUPERIOR COURT OF THE STATE OF CALIFORNIA  
14 FOR THE COUNTY OF LOS ANGELES

15  
16 SANDRA TROIAN, Ph.D.,

17 Plaintiff,

18 vs.

19  
20 CALIFORNIA INSTITUTE OF  
21 TECHNOLOGY,

22 Defendant.  
23  
24  
25  
26  
27  
28

BS 152258

Case No. \_\_\_\_\_

PETITION FOR WRIT OF MANDATE

AND

COMPLAINT FOR DAMAGES AND  
DECLARATORY AND INJUNCTIVE  
RELIEF

(1) Retaliation in Violation of Cal. Labor  
Code, § 1102.5(b)

(2) Breach of Contract

(3) Breach of Implied Covenant of Good  
Faith and Fair Dealing

JURY TRIAL DEMANDED

1 Plaintiff/Petitioner SANDRA M. TROIAN, Ph.D. (“Dr. Troian”) alleges as follows:

2 **PRELIMINARY STATEMENT**

3 1. Dr. Troian brings this Complaint for damages and Petition for a peremptory writ of  
4 mandate against Respondent/Defendant, the California Institute of Technology (“Defendant” or  
5 “Caltech”).

6 2. Dr. Troian seeks damages against Caltech for retaliating against her in violation of  
7 California Labor Code § 1102.5(b) because she disclosed to FBI agents and to Caltech officials  
8 activities at Caltech that she reasonably believed to be unlawful. Dr. Troian further brings this  
9 action for Breach of Contract and for Breach of Implied Covenant of Good Faith and Fair Dealing.

10 3. Dr. Troian seeks a peremptory writ of mandate under California Code of Civil  
11 Procedure § 1094.5, or alternatively, California Code of Civil Procedure § 1085, to void the  
12 erroneous findings and decision Caltech issued against her.

13 **PARTIES**

14 4. Dr. Troian is, and at all times relevant herein was, a California resident and  
15 residing in Pasadena, CA.

16 5. Defendant Caltech is, and at all times relevant herein was, a non-profit corporation  
17 with its principal place of business in Pasadena, CA.

18 **JURISDICTION AND VENUE**

19 6. Dr. Troian is, and at all relevant times was, employed as a tenured Full Professor  
20 at Caltech’s principal place of business in Pasadena, CA, within the boundaries of Los Angeles  
21 County, California. Therefore both jurisdiction and venue properly lie with this Court.

22 **EXHAUSTION OF ADMINISTRATIVE REMEDIES**

23 7. On April 17, 2014, Dr. Troian submitted a Retaliation Complaint against Caltech  
24 to the California Department of Industrial Relations, Division of Labor Standards Enforcement  
25 (“DLSE”) pursuant to Cal. Labor Code § 1102.5.

26 8. On April 25, 2014, the DLSE issued Dr. Troian a letter of exhaustion on her  
27 claims. Attached hereto as Exhibit 1 is a true and correct copy of this letter.

28 9. On May 27, 2014, Dr. Troian submitted a notice of retaliation to the California

1 Labor and Workforce Development Agency (“LWDA”) and to Defendant, pursuant to California  
2 Labor Code § 2699.3.

3 10. On June 27, 2014, the LWDA issued Dr. Troian a letter of exhaustion on her  
4 claims. Attached hereto as Exhibit 2 is a true and correct copy of this letter.

### 5 FACTUAL ALLEGATIONS

#### 6 **Dr. Troian is a Prominent Physicist and Academic at Caltech.**

7 11. Dr. Troian has been a physicist and accomplished academic scholar for over  
8 twenty-five years.

9 12. Dr. Troian holds a B.A. in Physics from Harvard University and a M.S. and Ph.D.  
10 in Physics from Cornell University. Prior to joining Caltech, she was a faculty member at  
11 Princeton University, where she was promoted to tenured Associate Professor in 1999 and Full  
12 Professor in 2002.

13 13. Caltech recruited Dr. Troian to join its faculty as a Professor of Applied Physics,  
14 of Aeronautics, and of Mechanical Engineering in the Division of Engineering and Applied  
15 Science (“EAS”).

16 14. Dr. Troian began her employment at Caltech in September 2006. Her employment  
17 is governed by a contract between her and Caltech, executed on May 3, 2006, and by Caltech’s  
18 Faculty Handbook.

19 15. Dr. Troian is the only female faculty member in Applied Physics at Caltech, and  
20 one of only four female physicist faculty members on campus.

21 16. Dr. Troian has earned numerous awards for her research and teaching from the  
22 National Science Foundation, the American Physical Society, the Caltech Moore Distinguished  
23 Scholar program, and Princeton and Caltech. She has served on numerous editorial, executive,  
24 and advisory boards including the Defense Sciences Research Council, the Annual Reviews of  
25 Fluid Mechanics, the Physics of Fluids, the Kavli Institute for Theoretical Physics, the  
26 Microdevices Laboratory of the Jet Propulsion Laboratory, the Max-Planck-Institut für Dynamik  
27 und Selbstorganisation, the Society of Engineering Science, Inc., and the Institute for Defense  
28 Analysis. She has also worked in industry, and consults for government and private sector

1 organizations.

2 17. Dr. Troian is also a contractor and holds research privileges at the Jet Propulsion  
3 Laboratory (“JPL”), which is a federally-funded research and development facility managed by  
4 Caltech on behalf of the National Aeronautics and Space Administration (“NASA”).

5 18. Federal export control laws govern the conditions under which certain information,  
6 technologies, and commodities at JPL can be transmitted to other countries, or to unauthorized  
7 persons in the U.S. Several federal agencies, including the U.S. Department of State through its  
8 International Traffic in Arms Regulations (“ITAR”), administer federal export control laws.

9 **Dr. Troian Reported Apparent Illegal Activity by Her Postdoctoral Scholar,**

10 **Dr. Amir Gat, to Caltech, but Caltech Refused to Take Action.**

11 19. In March 2010, Dr. Troian became Principal Investigator (“PI”) on an export  
12 controlled project at JPL known as the Electrospray Thruster Array Technology Feasibility Study  
13 Project (“Electrospray Project”). The goal of the Electrospray Project was to design a new type of  
14 space micropropulsion system.

15 20. The Electrospray Project was ITAR-restricted, which meant that Dr. Troian and all  
16 other project researchers could not divulge or export any project-related technical data to foreign  
17 end users or foreign destinations without U.S. government authorization.

18 21. The Defense Advanced Research Projects Agency (“DARPA”) funded the  
19 Electrospray Project.

20 22. Dr. Troian hired Dr. Amir Gat to work with her on the Electrospray Project as a  
21 postdoctoral research scholar in March of 2010.

22 23. Dr. Gat is an Israeli foreign national, who, at the time, had recently earned his  
23 Ph.D. in Aerospace Engineering from the Technion – Israel Institute of Technology (“ITT”).

24 24. Caltech approved Dr. Gat’s hiring as a Caltech employee.

25 25. As Dr. Gat’s research supervisor, Dr. Troian had a duty to ensure Dr. Gat’s  
26 compliance with ITAR.

27 26. Both Dr. Troian and Dr. Gat signed a Technology Control Plan (“TCP”) and  
28 addendum governing the Electrospray Project. In so doing, they certified their understanding of

1 their obligations not to disclose ITAR-restricted technical data to foreign persons or foreign  
2 countries without prior approval from the U.S. Department of State and that failure to comply with  
3 this obligation could subject them to criminal fines and penalties.

4 27. A violation of the TCP constitutes a violation of ITAR.

5 28. Soon after Dr. Gat began working for Dr. Troian on the Electrospray Project, Dr.  
6 Troian began to suspect him of violating the TCP and ITAR provisions.

7 29. Dr. Gat refused to properly record and safeguard his calculations, numerical  
8 simulations, and technical details of the JPL device, as required by DARPA, the TCP, and ITAR.

9 30. Dr. Gat also stored project-related files and technical information on his personal  
10 laptop, rather than on his safeguarded office computer, in violation of the TCP and ITAR.

11 31. Dr. Gat also repeatedly entered erroneous numbers into the design software code  
12 when running project simulations, despite clear instructions from Dr. Troian and JPL researchers  
13 on which numbers to use.

14 32. On May 25, 2010, a virus attacked Dr. Troian's computer network at Caltech,  
15 causing hundreds of project files to be uploaded in rapid succession to an unknown IP address  
16 outside of Caltech and causing Caltech to disable Dr. Troian's network for several days.

17 33. Dr. Troian traced the virus that caused the network problems to Dr. Gat's  
18 computer, and notified Caltech officials of this fact.

19 34. When Dr. Troian questioned Dr. Gat about the virus attack, he refused to disclose  
20 the websites he had visited prior to the attack on the network.

21 35. On May 28, 2010, Dr. Gat admitted to Dr. Troian that he had been sharing details  
22 of the Electrospray Project with Dr. Daniel Weihs, his Ph.D. advisor at ITT in Israel, without  
23 proper U.S. government approval. Dr. Gat refused to disclose to Dr. Troian the substance or  
24 extent of his transfer of information.

25 36. Dr. Weihs was a member of Israel's National Steering Committee for Space  
26 Infrastructure of the Ministry of Science, Chair of Israel's National Committee for Space  
27 Research, and Chief Scientist at the Ministry of Science and Technology.

28 37. On June 3, 2010, Dr. Troian found Dr. Gat wandering alone, unauthorized, in one

1 of her access-restricted experimental laboratories. Dr. Gat explained that Dr. Weihs had  
2 recommended that he “look around” to see what other aerospace projects were ongoing at Caltech  
3 in collaboration with JPL. Dr. Gat said that he was hoping that the Israel Institute of Technology  
4 would hire him in the future, after he left the United States and returned to Israel.

5 38. Throughout the summer of 2010, Dr. Troian reported to Caltech, her growing  
6 concerns that Dr. Gat was transferring export controlled information without proper U.S.  
7 government approval to various Caltech and JPL officials.

8 39. On June 4, 2010, Dr. Troian met with EAS Division Administrator Marianne  
9 Epallé and specifically requested that Ms. Epallé document Dr. Gat’s apparent TCP and ITAR  
10 violations. On June 14, 2010, Dr. Troian contacted Ms. Epallé and Dr. Rosakis again reiterating  
11 her concerns about Dr. Gat and requesting that they be documented for the record.

12 40. At least two JPL supervisors also reported Dr. Gat’s apparent illegal activity to the  
13 JPL Special Programs Security Manager, who handles espionage concerns.

14 41. To Dr. Troian’s knowledge, Caltech did not investigate Dr. Gat or otherwise take  
15 action in response to Dr. Troian’s or other JPL supervisors’ complaints of Dr. Gat’s TCP and  
16 ITAR violations.

17 42. Upon information and belief, during this period in 2010, Caltech was seeking to  
18 renew its contract with NASA to manage JPL, and, as part of the reapplication process, needed to  
19 certify that its employees and contractors were not violating U.S. government security regulations,  
20 including ITAR.

21 43. On August 3, 2010, Dr. Troian dismissed Dr. Gat from the Electrospray Project  
22 because of her security concerns about him. She instructed Dr. Gat to return all material belonging  
23 to the Project, but he refused to do so and threatened to continue working on the project.

24 44. Dr. Troian did not have the power to terminate Dr. Gat’s employment with Caltech  
25 entirely, only to dismiss him from her own research group.

26 45. On August 4, 2010, Dr. Gat emailed a JPL supervisor and asked for permission to  
27 continue working on Dr. Troian’s project or other aerospace projects at JPL. The supervisor  
28 denied Dr. Gat’s request and instructed Dr. Troian to secure all material in his possession.

1           46.       On August 8, 2010, a week after Dr. Troian terminated Dr. Gat from the  
2 Electro Spray Project, she discovered that he had been posting literature pertaining to the Project on  
3 a public web site since March 22, 2010, and that users worldwide were linking to the site. Dr.  
4 Gat's more than 65 online postings were unauthorized and revealed the key operating principle of  
5 the JPL micropropulsion device, which violated ITAR and the TCP.

6           47.       Dr. Troian immediately reported Dr. Gat's unauthorized online postings to Ms.  
7 Epallé, to a JPL supervisor, to April White, Caltech's Executive Director of Human Resources,  
8 and to Adam Cochran, Caltech's Associate General Counsel.

9           48.       Throughout August and September 2010, Dr. Troian submitted a series of requests  
10 to Caltech to secure and lock down Dr. Gat's work-related materials and electronic files, and to  
11 confiscate his office and building keys and campus ID. Dr. Troian contacted Dr. Ares Rosakis,  
12 Caltech's EAS Division Chair; Susan Connor, a Caltech Senior Human Resources ("HR")  
13 Consultant; Julia McCallin, Caltech's Associate Vice President of HR; and Dr. Morteza Gharib,  
14 Caltech's Vice Provost of Research, among others.

15           49.       On August 16, 2010, Dr. Troian met with Dr. Gharib. As Caltech's Vice Provost  
16 of Research, Dr. Gharib was responsible for investigating Dr. Gat's possible ITAR violations and  
17 for securing his work-related materials.

18           50.       During the meeting, Dr. Troian explained Dr. Gat's erratic behavior and his  
19 admission that he had improperly transferred ITAR-controlled technical data to Dr. Weihs. She  
20 explained that she did not know the full extent of the transfer because Dr. Gat failed to document  
21 it, and refused to give her access to his laptop on which the project files were stored. Dr. Troian  
22 insisted that Caltech immediately terminate Dr. Gat's employment and secure all of his material  
23 pertaining to the Electro Spray Project.

24           51.       Dr. Gharib told Dr. Troian "It's not my business." He further told Dr. Troian that  
25 he (Gharib) was "best friends" with Dr. Weihs, Dr. Gat's Ph.D. advisor in Israel with whom Dr.  
26 Gat had admitted sharing ITAR-restricted information, and that, as a favor to Dr. Weihs, he  
27 (Gharib) had already offered Dr. Gat a postdoctoral research scholar position in his own research  
28 group since she had terminated him.

1           52.       On August 19, 2010, Ms. Epallé went to Dr. Gat's former office and hurriedly put  
2 all of his work materials into a cardboard box. Dr. Troian tried to stop Ms. Epallé, telling her that  
3 her actions violated ITAR and Caltech protocol for securing such materials. Ms. Epallé responded  
4 that she was under direct orders to remove the material and to give it to Dr. Gat. Dr. Troian tried  
5 to physically stop Ms. Epallé, but she rushed out of the room with Dr. Gat's work materials.

6           53.       No one at Caltech ever made Dr. Gat return his work files, or ever reviewed his  
7 laptop for ITAR information. It waited several weeks to request that Dr. Gat return his office  
8 keys, and that he remove the project-related information that he had posted online improperly, and  
9 likely illegally, after Dr. Troian terminated him from the Electrospray Project.

10          54.       Dr. Gat worked in Dr. Gharib's research group at Caltech from August 2010 until  
11 July 2012.

12          55.       Dr. Gat has since returned to Israel, where he is Assistant Professor of Mechanical  
13 Engineering at ITT, an Israeli government institution, and he continues to actively publish with Dr.  
14 Gharib.

15                   **FBI Agents Approached Dr. Troian about Dr. Gat, and She Truthfully**

16                                   **Disclosed His Apparent Unlawful Activities.**

17          56.       On June 28, 2012, Kelly M. Sullivan and David Tsang, FBI agents with the Los  
18 Angeles County Counterintelligence Division, approached Dr. Troian and told her that there had  
19 been several security breaches at JPL.

20          57.       They told her that Dr. Gat was a focus of a larger investigation involving ITAR  
21 violations and possibly espionage, and asked her for information pertaining to his activities at JPL  
22 and Caltech.

23          58.       Dr. Troian responded to all of the FBI agents' questions truthfully. She responded  
24 that she believed Dr. Gat had, in fact, violated federal export control laws while at Caltech. The  
25 agents asked Dr. Troian if she had ever reported Dr. Gat and to whom, and she replied that she had  
26 repeatedly voiced her concerns to Caltech officials, including Drs. Gharib and Rosakis, and to JPL  
27 supervisors, but Caltech had failed to investigate Dr. Gat. They asked Dr. Troian about Dr. Gat's  
28 whereabouts, and she replied that he was still on campus, because Dr. Gharib had taken Dr. Gat



1 into his own research group immediately after she dismissed Dr. Gat from her own. The agents  
2 asked why Dr. Gharib had hired Dr. Gat, and she told the agents about Dr. Weihs's relationship  
3 with Dr. Gharib.

4 59. The agents urged Dr. Troian to execute an affidavit containing this information  
5 about Drs. Gat, Rosakis, and Gharib. Dr. Troian voiced her fear of retaliation by Caltech if she  
6 were to execute an affidavit, and declined to do so.

7 60. On July 3, 2012, Agent Sullivan returned to ask Dr. Troian more questions about  
8 illegal activity at Caltech and JPL. Although Dr. Troian answered Agent Sullivan's questions,  
9 because of fear of retaliation from Caltech, she again declined to execute an affidavit.

10 **Caltech Officials Accused Dr. Troian of Calling the FBI, and Launched a**  
11 **Campaign of Retaliation and Intimidation Against Her.**

12 61. On July 18, 2012, two weeks after Dr. Troian's second conversation with the FBI,  
13 Dr. Rosakis, Ms. Epallé, and Dr. Gharib met with Dr. Troian under the pretext of discussing  
14 matters related to Dr. Troian's postdoctoral research scholars.

15 62. During the meeting, Drs. Gharib and Rosakis accused Dr. Troian of calling the  
16 FBI to Caltech and pressured her to divulge the content of her conversations with the FBI. Dr.  
17 Troian explained that the FBI had approached her and asked about Dr. Gat. Drs. Gharib and  
18 Rosakis insisted that they knew that Dr. Troian had called the FBI. They demanded: "How did  
19 they find out? How did they know? And why him [Dr. Gat]?"

20 63. Dr. Troian reiterated that Dr. Gat had likely violated federal export control laws  
21 and that Caltech should have fired him immediately, rather than keeping him engaged for more  
22 than two years.

23 64. Dr. Gharib admitted that he knew Dr. Gat had spoken to Dr. Weihs about the  
24 Electrospray Project. He insisted that Dr. Gat had "made a mistake" in violating any laws. He  
25 stated that he had asked Dr. Gat about the violations and "he [Dr. Gat] said 'no' and we accepted  
26 that."

27 65. In this meeting, Drs. Rosakis and Gharib also falsely accused Dr. Troian of  
28 mistreating former postdoctoral research scholars who had worked with her, including Dr. Gat

1 and Dr. Anoosheh Niavarani, a postdoc who worked under Dr. Troian from June 2011 to  
2 June 2012.

3 66. Drs. Rosakis and Gharib threatened to bar Dr. Troian from hiring future  
4 postdoctoral research scholars, which would seriously impede her ability to perform her research.

5 67. This was the first time anyone had accused Dr. Troian of mistreating postdoctoral  
6 research scholars.

7 68. When Dr. Troian pushed Drs. Gharib and Rosakis to reveal the basis for any  
8 postdoctoral research scholar complaints against her, they admitted that no formal complaints  
9 existed.

10 69. The meeting lasted two hours and ended with Drs. Gharib and Rosakis warning  
11 Dr. Troian that her behavior was becoming “dangerous” for the Division and for Caltech.

12 70. On July 22, 2012, Dr. Troian wrote a letter to Dr. Stolper, Caltech’s Provost,  
13 asking him to address Drs. Gharib’s and Rosakis’s harassment and baseless allegations. Drs.  
14 Troian and Stolper met on July 30, 2012. At the outset of the meeting, Dr. Stolper also accused  
15 Dr. Troian of calling the FBI. He stated that Ms. Stratman and “many people” had personally  
16 informed him that she had called the FBI.

17 71. At the meeting, Dr. Stolper told Dr. Troian that Caltech did not like its employees  
18 calling the authorities. He said repeatedly, “You’re difficult. That’s what you are and you are  
19 going to have to live with that.” He told Dr. Troian that he was “feared” on campus.

20 72. At the same meeting, Dr. Stolper also accused Dr. Troian of mistreating her  
21 postdoctoral research scholars. He told Dr. Troian that Dr. Niavarani had lodged a  
22 complaint against her and that lawyers were involved, but he refused to elaborate or to show Dr.  
23 Troian a copy of the supposed complaint. Before Dr. Troian left his office, Dr. Stolper again told  
24 her “everybody is afraid of me” and said he wondered why that was so.

25 73. That same day, Drs. Gharib and Rosakis placed a false disciplinary warning in Dr.  
26 Troian’s personnel file without her knowledge. The warning stated that three of her former  
27 postdoctoral research scholars — Drs. Gat, Niavarani, and Dietzel — “had serious  
28 complaints about working with [her],” and that they would bar her from hiring postdoctoral

1 research scholars if one more complaint were filed.

2 74. Caltech has never shown or explained to Dr. Troian any of these supposed  
3 complaints, despite her repeated requests. In fact, on a least two occasions, Drs. Gharib and  
4 Rosakis have admitted that no such complaints existed, and that Dr. Niavaranikeiri had left  
5 Caltech due to personal issues.

6 75. Caltech has refused to remove the disciplinary letter from her file, despite the fact  
7 that it is based on information that Drs. Gharib and Rosakis have admitted is false.

8 **Caltech Falsely Accused Dr. Troian of Research Misconduct.**

9 76. Dr. Troian has investigated the physics of temperature discontinuities at gas-solid  
10 and liquid-solid interfaces in nanoscale systems (“thermal slip”) since 2010, and published a paper  
11 on the topic in February of 2011. She has been investigating velocity discontinuities at liquid-  
12 solid interfaces (“velocity slip”), since 1997, and is well known for a discovery reported in the  
13 journal, Nature, in 1997.

14 77. In June 2011, Dr. Troian hired Dr. Anoosheh Niavaranikeiri as a postdoctoral  
15 research scholar to assist her with computer simulations on thermal slip. Because Dr.  
16 Niavaranikeiri had no background in thermal slip, Dr. Troian first tasked her with reproducing  
17 results that had already been documented in the scientific literature to prepare and train her to  
18 work on novel problems with Dr. Troian.

19 78. Dr. Niavaranikeiri’s simulations produced erroneous results. Dr. Troian notified  
20 Dr. Niavaranikeiri of this on several occasions, beginning in November of 2011, but by May  
21 2012, Dr. Niavaranikeiri had not been able to reproduce successfully the results documented in  
22 scientific literature. As a result, Dr. Troian began conducting her own computer simulations on  
23 the project, using different computing algorithms, techniques, and hardware than Dr.  
24 Niavaranikeiri.

25 79. Dr. Niavaranikeiri abruptly left Caltech in early June 2012. Dr. Niavaranikeiri  
26 never gave Dr. Troian notice or an explanation for why she never returned to work, though she  
27 later told Dr. Gharib that she was having personal problems and did not like the environment at  
28 Caltech. She never progressed enough in her thermal slip simulations to work on the novel

1 problems for which Dr. Troian had hired her.

2           80.       After Dr. Niavaranikheiri's sudden departure, Dr. Troian began to look for a new  
3 assistant on the project.

4           81.       On August 2 , 2012, while still seeking a new assistant, Dr. Troian submitted  
5 several online abstracts (approximately 200 words each) to present at the 2012 American Physical  
6 Society Meeting of the Division of Fluid Dynamics ("APS DFD") scheduled for November 2012.

7           82.       APS talks are informal ten-minute reports by members of the scientific community  
8 regarding their current research.

9           83.       APS abstracts are 200-word summaries that researchers submit in advance of their  
10 talks. The abstracts are not scientific publications; rather, they are informal, not refereed, and they  
11 are subject to change at any time. They are also not required to correspond to the eventual talk  
12 that the researcher gives at the APS meeting, as research is often developed between the  
13 submission date and the presentation date.

14           84.       One of Dr. Troian's abstracts focused on the simulations she had been conducting  
15 on thermal slip ("2012 APS abstract"). The abstract did not include Dr. Niavaranikheiri's name,  
16 because Dr. Niavaranikheiri's results had not contributed to Dr. Troian's work on the topic.

17           85.       APS abstracts can list multiple authors, and the APS typically accepts one abstract  
18 per first author. Knowing this, and with hopes of finding a new assistant before the conference,  
19 Dr. Troian listed herself as second author on the 2012 APS abstract because she was first author on  
20 another abstract that year. Dr. Troian used the placeholder name of M. Pucci for the first author,  
21 which is her cat's name.

22           86.       There are many examples in the Physics and Mathematics literature in which  
23 names of pets or other humorous objects appear as co-authors on archival, peer reviewed and  
24 highly cited journals. Prof. Andre Greim, recipient of the 2010 Nobel Prize in Physics, co-  
25 authored a scientific paper in 2001 with his pet hamster, H.A.M.S. ter Tisha. In 1975, Prof. Jack  
26 Hetherington co-authored a well-cited paper in Physical Review Letters, a leading physics journal,  
27 with his cat F.D.C. Willard. Prof. Doron Zeilberger, recipient of the 2004 Euler Medal in  
28 Mathematics, has co-authored over 30 technical papers with Shalosh B. Ekhad, the name of his

1 computer.

2 87. By November 18, 2012, the date of the APS meeting, Dr. Troian had been unable  
3 to find a new assistant and had finished her simulations just shy of the meeting. She informed the  
4 APS meeting officials of this change and delivered the ten-minute talk herself.

5 88. Upon Dr. Troian's request, APS later deleted the placeholder name from the online  
6 scientific program.

7 89. Dr. Gharib attended Dr. Troian's presentation.

8 90. Dr. Gat was also at the APS meeting, and spoke with Dr. Gharib there several  
9 times.

10 91. On December 14, 2012, Drs. Gharib and Rosakis summoned Dr. Troian to the  
11 EAS Division Office. Fearing threats and retaliation similar to what she had experienced earlier  
12 that year, Dr. Troian requested the presence of a neutral third party in advance of the meeting, but  
13 Drs. Gharib and Rosakis refused.

14 92. At the meeting, Drs. Gharib and Rosakis claimed that Dr. Niavaranikheiri had filed  
15 a formal complaint against Dr. Troian two weeks before the 2012 APS meeting alleging that Dr.  
16 Troian failed to list her (Dr. Niavaranikheiri) as a co-author on the 2012 APS abstract. Drs.  
17 Gharib and Rosakis refused to show the alleged complaint to Dr. Troian, despite her requests, and  
18 offered no explanation as to why they failed to notify Dr. Troian of this supposed complaint until  
19 after Dr. Troian had presented her talk.

20 93. Drs. Gharib and Rosakis also questioned Dr. Troian's use of a placeholder name  
21 on the abstract.

22 94. Dr. Troian explained that Dr. Niavaranikheiri did not contribute to the 2012 APS  
23 abstract or to any of the results Dr. Troian presented at the meeting, and that Dr. Niavaranikheiri's  
24 results in fact contradicted those that Dr. Troian presented at the meeting.

25 95. Dr. Troian also explained that she had used the placeholder name while she was  
26 seeking a new assistant on the project, but that she had been unable to find one in time for the  
27 conference.

28 96. Dr. Gharib admitted his familiarity with the informality of APS abstracts, and that

1 it was common practice for presenters to give more than one talk at APS meetings, as Dr. Troian  
2 had, but he was not interested in Dr. Troian's response to his and Dr. Rosakis' accusations.  
3 Instead, Dr. Gharib stated that FBI agents had returned to Caltech two weeks earlier to look for Dr.  
4 Gat.

5 97. Drs. Gharib and Rosakis reiterated that they were upset about the FBI's visits to  
6 Caltech and about having "a faculty member that attracts these situations." Dr. Rosakis claimed  
7 that it was Dr. Gharib's responsibility as Vice Provost of Research to ensure that the FBI did not  
8 come to campus. Both officials accused Dr. Troian of harming Caltech's reputation.

9 98. On December 17, 2012, Dr. Kaushik Bhattacharya, Executive Chair of the  
10 Department of Mechanical Engineering, of which Dr. Troian is a faculty member, emailed Dr.  
11 Troian to tell her that he was considering terminating her affiliation within the department.

12 99. Dr. Bhattacharya is a close friend and colleague of Dr. Rosakis.

13 100. Dr. Bhattacharya claimed that Dr. Troian was not sufficiently participating in  
14 department activities, even though Dr. Troian has been actively involved in recruiting and advising  
15 students in the department since 2007.

16 101. Dr. Troian responded to Dr. Bhattacharya's email with a lengthy rebuttal on  
17 January 4, 2013, and contacted him again on February 27, 2013, but he never responded.

18 102. On December 18, 2012, the day after Dr. Bhattacharya's email, Dr. Stolper  
19 notified Dr. Troian that he and the two other selection committee members had denied her  
20 proposal for \$592,000 in funding from the FY 2013 JPL/Caltech President's and Director's Fund  
21 for her collaborative research at JPL. Dr. Troian was shocked at the denial because JPL officials  
22 had strongly supported her proposal.

23 103. On December 21, 2012, Dr. Stolper telephoned Dr. Troian to reiterate the  
24 "seriousness" of Drs. Gharib's and Rosakis's allegations that she had misappropriated Dr.  
25 Niavarani's work and had used a placeholder name in the 2012 APS abstract. He told Dr.  
26 Troian that her actions constituted "research misconduct," and had "irreparably harmed" the  
27 reputation of the Institute.

28 104. Charges of research and academic misconduct are among the most serious and

1 damaging against a faculty member. Such charges, even if later withdrawn, have far reaching,  
2 long-lasting repercussions that can damage an academic and consulting career permanently.

3 105. Dr. Stolper asked Dr. Troian to send him the slides from her APS presentation, and  
4 she immediately did so via intra-campus mail.

5 106. On Christmas Eve 2012, Dr. Stolper emailed Dr. Troian that he had not received  
6 the APS slides, and insinuated that she was delaying sending them in order to change them. Dr.  
7 Troian therefore spent part of Christmas Eve in her office at Caltech, re-transmitting the  
8 presentation files to Dr. Stolper.

9 107. On December 29, 2012, Dr. Stolper wrote to Dr. Troian: "there can be no  
10 mitigation [of the alleged misconduct] based on any circumstances I can envision," which  
11 effectively declared Dr. Troian guilty before any investigation.

12 108. On January 4, 2013, Dr. Troian sent Dr. Stolper a detailed letter explaining that  
13 Drs. Gharib and Rosakis's allegations were in retaliation for her speaking to the FBI, and that she  
14 had never engaged in any misconduct.

15 109. Caltech's Whistleblower Policy, which is part of Dr. Troian's contract with  
16 Caltech, prohibits "retaliation against an individual who makes a good faith disclosure of  
17 suspected wrongful conduct" and provides that if "an employee believes s/he has been the subject  
18 of retaliation for making a good-faith disclosure, s/he is encouraged to contact her/his supervisor."  
19 Dr. Troian's January 4, 2013 letter was the second time she had complained to Dr. Stolper, her  
20 supervisor, about Drs. Rosakis and Gharib's retaliation against her for her disclosures about Dr.  
21 Gat to the FBI. Instead of investigating Dr. Troian's retaliation complaints in accordance with  
22 Caltech's Whistleblower Policy, Dr. Stolper further conspired with Drs. Gharib and Rosakis to  
23 silence Dr. Troian and to push her out of her job at Caltech.

24 110. On February 26, 2014, Dr. Stolper told Dr. Troian that he intended to move  
25 forward with an investigation. He claimed that he had received written documentation related to  
26 Dr. Troian's alleged misconduct from Drs. Gharib and Rosakis, but refused to share it with her.

27 ///

28 ///

1                    **Caltech Conducted a Sham Investigation into the Charges Against Dr. Troian and**  
2    **Issued False Findings Against Her.**

3            111.        On March 1, 2013, Dr. Grace Fisher-Adams, Caltech's Director of Research  
4 Compliance, emailed Dr. Troian a letter from Dr. Stolper stating that he had instituted an  
5 investigation against her to address:

- 6                    (1)    your admitted listing of your cat as first author on the submitted and  
7    published abstract; and (2) an allegation by Dr. Anoosheh Niavaranikeiri,  
8    your postdoctoral fellow from 2011 to 2012, that the work presented in the  
9    abstract is, in part, her work for which she should have received credit as a  
    coauthor.

10           112.        Caltech's charges against Dr. Troian amounted to charges of plagiarism and  
11 falsification of the research record, which constitute "research misconduct" under the Misconduct  
12 Policy set forth in the Caltech Faculty Handbook. Faculty Handbook at 7/1. Dr. Stolper had in  
13 fact already told Dr. Troian that the charges against her constituted "research misconduct." Dr.  
14 Troian was therefore entitled to the protections set forth in the Handbook's Misconduct Policy.

15           113.        Rather than follow the Handbook's Misconduct Policy, however, Dr. Stolper's  
16 March 1, 2013 letter said that Caltech was using the Misconduct Policy only as "guidance," which,  
17 in effect, allowed Caltech to bend the rules and find Dr. Troian guilty regardless of the evidence  
18 uncovered in the investigation. Throughout Caltech's investigation, Dr. Fisher-Adams and  
19 members of the Investigation Committee repeatedly denied that Dr. Troian had been charged with  
20 research misconduct and reiterated that they were merely using the Misconduct Policy as a  
21 "framework" for the investigation.

22           114.        Pursuant to the Misconduct Policy, Dr. Stolper assembled an Investigation  
23 Committee to investigate the allegations against Dr. Troian. Dr. Stolper hand-picked the  
24 committee.

25           115.        Between March 1, 2013 and May 8, 2013, Dr. Stolper's hand-picked Investigation  
26 Committee interviewed witnesses and collected evidence related to the charges against Dr. Troian.  
27 On April 19, 2013, Dr. Troian submitted 198 pages of supporting documentation in her defense,  
28 though Caltech refused to show her Dr. Niavaranikeiri's purported complaint or to identify which



1 text, slides, plots, equations, data, or results were in dispute.

2 116. On May 8, 2013, Dr. Troian attended a hearing before the Investigation Committee  
3 to address the two charges against her. Dr. Fisher-Adams also attended. Caltech denied Dr.  
4 Troian's request that a neutral third party document the proceedings. The hearing lasted nearly  
5 three hours. Towards the end of the hearing, the Committee asked Dr. Troian to immediately turn  
6 over the slides for another ten minute talk on thermal slip that she presented at the 2013 APS  
7 meeting.

8 117. Following the hearing, Dr. Troian submitted an additional 200 pages of emails  
9 between herself and Dr. Niavaranikeiri to the Committee, all of which definitively proved that  
10 Dr. Niavaranikeiri and Dr. Troian had a friendly working relationship, contrary to what Drs.  
11 Stolper, Gharib, and Rosakis, and later the Committee, alleged.

12 118. On July 1, 2013, the same day that Dr. Stolper became Interim President, the  
13 Investigation Committee released a Draft Report dated June 25, 2013. The Report ignored Dr.  
14 Troian's exculpatory evidence, and presented new and unfounded allegations that Caltech had  
15 never given her an opportunity to address.

16 119. The Draft Report also revealed that Dr. Niavaranikeiri had never, in fact, filed a  
17 formal complaint against Dr. Troian. She had emailed Caltech's Human Resources Department  
18 six weeks prior to Dr. Troian's 2012 APS presentation to inquire as to the identity of M. Pucci, the  
19 name that Dr. Troian had used as a placeholder while seeking a new assistant. She subsequently  
20 responded to an email from Dr. Gharib pertaining to her research with Dr. Troian. Upon  
21 information and belief, Dr. Niavaranikeiri thereafter refused to cooperate with the Investigation  
22 Committee, refused to be interviewed by the Investigation Committee, and refused to provide the  
23 Investigation Committee with actual evidence of plagiarism or misappropriation.

24 120. On August 19, 2013, Dr. Troian responded to the Draft Report with a 125 page  
25 point-by-point rebuttal in her defense.

26 121. On September 1, 2013, the Investigation Committee issued a Final Report finding  
27 Dr. Troian guilty of wrongdoing, despite clear evidence to the contrary. The Report omitted  
28 seventy pages of Dr. Troian's exculpatory evidence. Dr. Fisher-Adams claimed this omission was

1 an error.

2 122. The Final Report also included Dr. Troian's confidential January 4, 2013 letter to  
3 Dr. Stolper, which revealed that she had spoken to the FBI about apparent illegal activity at  
4 Caltech.

5 123. On October 17, 2013, Melany Hunt, Vice Provost of Academic Affairs, acting at  
6 the direction of Provost and then-Interim President Stolper, ratified the Committee's findings and  
7 issued a decision recommending three sanctions against Dr. Troian:

- 8 1) Dr. Troian was to draft a letter notifying APS that she had violated their  
9 policies with her November 2012 and March 2013 presentations; and if she  
10 refused to do so, Dr. Hunt would notify APS herself;
- 11 2) Dr. Troian was to acknowledge Dr. Niavarani in all future  
12 publications related to any of her "work on molecular dynamics  
13 simulations at liquid/solid interfaces;" and
- 14 3) Dr. Troian was to send "copies of preprints of future papers on this topic to  
15 the Office of the Provost and EAS Division Office," namely Drs. Gharib  
16 and Rosakis.

17 The second and third penalties, i.e. the monitoring of Dr. Troian's future work, were taken  
18 directly from the Handbook's Misconduct Policy. Dr. Hunt further directed that a copy of her  
19 decision be retained in the Office of the Provost and in the EAS Division Office, and it is now in  
20 Dr. Troian's personnel file.

21 124. Pursuant to the Misconduct Policy, Dr. Troian appealed Dr. Hunt's decision on  
22 November 1, 2013.

23 125. Dr. Stolper, in his capacity as then-Interim President, was tasked with deciding Dr.  
24 Troian's appeal.

25 126. On March 18, 2014, Dr. Troian met with Dr. Stolper at his request.

26 127. At the meeting, Dr. Stolper refused to discuss the facts of her case or the  
27 underlying charges, as the Handbook requires at the appeal stage. He instead told Dr. Troian, "I  
28 don't know what the facts are and I don't care." He stated that he could "make things go away" if

1 she admitted that she had exercised “poor judgment” and mistreated students, postdocs, and  
2 colleagues at Caltech. He told Dr. Troian the exact words he wanted to hear her use to confess to  
3 the false allegations of misconduct, and stated it “avoids having to find the truth.” He emphasized  
4 there was no point in discussing what happened when or who said what.

5 128. Dr. Stolper acknowledged that he did not believe that Dr. Troian misappropriated  
6 Dr. Niavaranikeiri’s work, but nonetheless asked Dr. Troian to falsely confess to doing so and he  
7 would dismiss the report. When Dr. Troian refused, and told Dr. Stolper that crediting Dr.  
8 Niavaranikeiri on the abstract would be fraud, he said, “You say it’s fraud - I don’t think it’s  
9 fraud. I think it’s just how you make the world go round on something like this.” He quoted lines  
10 from the movie Harvey, in which the character stated, “My mother would say ‘Elwood, in this  
11 world you can be oh so very smart or oh so very nice.’ For years I tried smart - I recommend  
12 nice.”

13 129. Dr. Troian indicated to Dr. Stolper that the investigation was part of Caltech’s  
14 retaliatory campaign against her for her reports to the FBI. Dr. Stolper threatened, “God, if you  
15 think you’ve had a bad two years, wait for the next two years of being confrontational with  
16 Caltech. It just won’t be fun.” He told Dr. Troian to call him with her decision and repeatedly  
17 directed her not to put anything in writing. Dr. Stolper told Dr. Troian that if she did not cooperate  
18 with him, he would affirm the findings against her and she would be “miserable.” On April 11,  
19 2014, Dr. Troian wrote Dr. Stolper a letter that memorialized the appeal meeting and indicated that  
20 she would not admit to the false charges against her.

21 130. On April 14, 2014, three days after Dr. Troian’s letter, Dr. Stolper issued a  
22 decision on Dr. Troian’s appeal that affirmed the Investigation Committee’s findings against her.  
23 Pursuant to the Faculty Handbook’s Misconduct Policy, Dr. Stolper’s decision was final.

24 131. Several days later, on April 22, 2014, Dr. Stolper notified Dr. Troian that he had  
25 also denied her proposal for \$520,952 in funding from the FY 2014 JPL/Caltech President’s and  
26 Director’s Fund for her research at JPL, though her proposal had, again, received wide support  
27 from top officials at JPL.

28 ///

1                                    **Caltech's Investigation of Dr. Troian Violated Its Misconduct Policy.**

2            132.     The Misconduct Policy provides that faculty members accused of research  
3 misconduct are entitled to an investigation and hearing, and that, upon recommendation of the  
4 appropriate academic division chair ("DC") and Provost, the President renders a final decision.  
5 Faculty Handbook at 7/1.

6            A.        **Caltech Denied Dr. Troian an Inquiry into the Charges it Levied**  
7                                    **Against Her.**

8            133.     Charges of research misconduct must proceed through three stages: Inquiry,  
9 Investigation, and Resolution. During the Inquiry stage, the Misconduct Policy requires:  
10                                    [T]he DC [Division Chair] [to] notify the respondent in writing of the charges and  
11 process to follow. . . . The nature of the inquiry . . . should be worked out by the  
12 DC in consultation with the complainant and respondent. . . . A written report  
13 shall be prepared that states what evidence was reviewed, summarizes relevant  
14 interviews, and includes the conclusions of the inquiry. The individual(s) against  
15 whom the allegation was made shall be given a copy of the report of the inquiry.  
16 If they comment on that report, their comments may be made part of the record.  
17 Faculty Handbook at 7/2 (emphasis added).

18            134.     Caltech failed to provide Dr. Troian with an Inquiry stage.

19            135.     Dr. Troian received written documentation of the charges against her for the first  
20 time on March 1, 2013, when Dr. Stolper sent her a letter stating that he had decided to initiate a  
21 formal investigation.

22            136.     Dr. Troian protested the lack of Inquiry and Inquiry Report for the first time on  
23 March 5, 2013, and again on May 8 and June 11, 2013. In response, Caltech claimed that Dr.  
24 Troian's December 14, 2012 meeting with Drs. Gharib and Rosakis constituted the "Inquiry."  
25 However, Dr. Troian was not presented with any written charges or evidence of misconduct before  
26 or during that meeting, during which Drs. Gharib and Rosakis repeatedly accused Dr. Troian of  
27 bringing the FBI to campus.

28            137.     The Institute failed to afford Dr. Troian any participation in an inquiry "process."  
It further failed to collect any evidence from her, provide her with a written "report of the inquiry,"  
or give her an opportunity to comment on any such report, even though Dr. Stolper acknowledged

1 on February 26, 2014 that he received the report from Drs. Gharib and Rosakis.

2 **B. Caltech Appointed an Investigation Committee Lacking Technical**  
3 **Competence in Dr. Troian's Field.**

4 138. The Misconduct Policy states that “[t]he principal criteria for [investigation  
5 committee] membership shall be fairness and wisdom, technical competence in the field in  
6 question, and avoidance of conflict of interest. ” Faculty Handbook at 7/3 (emphasis added).  
7 “Membership of the committee need not be restricted to the faculty of the Institute.” Id.

8 139. Dr. Stolper hand-picked the individuals on the Investigation Committee. Not a  
9 single member of the committee possessed technical competence in Dr. Troian's field of  
10 theoretical physics and molecular simulation techniques. Dr. Buchwald, the Chair, is a historian of  
11 science, Dr. Paul Dimotakis is an aeronautical engineer, Dr. Konstantinos Giapis is a chemical  
12 engineer, and Dr. Ellen Rothenberg is a biologist. The Policy explicitly permitted Caltech to seek  
13 experts outside the Institute to sit on the Committee, but Caltech rejected this option. Dr. Stolper  
14 ignored Dr. Troian's request that at least one of the individuals she identified with experience in  
15 her field be added to the Committee.

16 **C. Caltech Permitted Biased Individuals to Serve on the Investigation**  
17 **Committee.**

18 140. The Misconduct Policy states that any “semblance of conflict of interest must  
19 rigorously be avoided at all stages,” Faculty Handbook at 7/1, and “[t]he principal criteria for  
20 [investigation committee] membership shall be . . . avoidance of conflict of interest,” Faculty  
21 Handbook at 7/3 (emphasis added).

22 141. Caltech ignored Dr. Troian's concerns of bias of the Committee members. One  
23 half of the Committee had clear allegiances to Drs. Gharib and Rosakis, the individuals who  
24 initiated the complaint and campaign of retaliation against Dr. Troian.

25 142. Dr. Dimotakis has been close friends with Dr. Rosakis for over thirty years. The  
26 two have published together, and they shared a research grant shortly before the investigation  
27 commenced. Dr. Dimotakis was also Chief Technologist of JPL during 2010 when Dr. Troian  
28 reported Dr. Gat's possible ITAR violations; he was aware that Dr. Troian had spoken to the FBI.

1           143.     Dr. Giapis is a friend and colleague of Dr. Dietzel’s Ph.D. thesis supervisor. Drs.  
2 Rosakis and Gharib had previously accused Dr. Troian of mistreating Dr. Dietzel while he was a  
3 postdoc. Dr. Dimotakis recommended to Dr. Stolper that Dr. Giapis serve on the Committee.

4           144.     Dr. Troian complained of the conflicts of interest on the part of Dr. Dimotakis and  
5 Dr. Giapis to Committee Chair Buchwald, but he dismissed them.

6           **D.     Caltech’s Investigation Exceeded the Scope of the Charges Against**  
7           **Dr. Troian.**

8           145.     The Misconduct Policy requires that the accused faculty member be informed of  
9 “all allegations” against her “so that a response may be prepared.” Faculty Handbook at 7/3. In  
10 violation of this provision, the Committee investigated additional allegations of misconduct  
11 without notifying Dr. Troian of the new charges.

12           146.     Shortly after initiating the investigation, Caltech demanded that Dr. Troian turn  
13 over “all materials in connection with the allegations against her.” When Dr. Troian asked the  
14 Committee to define the charges with greater specificity so that she could collect the materials for  
15 the investigation, Caltech refused to provide further clarification, and instead claimed that it was  
16 not constrained by the charges in Dr. Stolper’s letter but rather that, “the committee’s investigation  
17 may lead it in other directions depending on their ongoing findings . . . .”

18           147.     In the process of the investigation, Caltech insisted that Dr. Troian’s entire laptop  
19 computer be imaged even though it contained personal medical records, Department of Defense  
20 materials that federal law prohibited from further distribution, and materials pertaining to Dr.  
21 Troian’s conversations with the FBI.

22           148.     Dr. Troian was forced to hire an attorney to protect her privacy and prevent  
23 unauthorized access to federally restricted material.

24           149.     When the Investigation Committee issued its Draft Report dated June 25, 2013,  
25 Dr. Troian learned for the first time that the Committee had investigated conduct related to an  
26 abstract she submitted for an APS meeting held in March 2013. Caltech failed to give Dr. Troian  
27 notice that it had charged her with misconduct related to the 2013 APS meeting, and she had no  
28 opportunity to rebut this false and unsupported charge at her hearing. The Committee’s Draft

1 Report nevertheless concluded that she had “adopted authorship manipulation a second time for  
2 rule-evasion purposes during submission of the 2013 APS March meeting abstract . . . including  
3 backdating the abstract submission date to the original submission date, compromising the  
4 scientific record.”

5 **E. Caltech Failed to Apply the Appropriate Evidentiary and Mens Rea**  
6 **Standards to Its Findings.**

7 150. The Misconduct Policy provides:

8 [A] finding of research misconduct requires that: There be a significant departure  
9 from accepted practices of the scientific community for maintaining the integrity  
10 of the research record; The misconduct be committed intentionally, or knowingly,  
11 or in reckless disregard of accepted practices; and The allegation be proven by a  
preponderance of the evidence.

12 Faculty Handbook at 7/1 (emphasis added).

13 151. With respect to Charge 1, the Investigation Committee made no finding that Dr.  
14 Troian’s use of a placeholder name on the 2012 APS abstract constituted a significant departure  
15 from accepted practices at APS conferences, or that Dr. Troian engaged in this conduct  
16 intentionally, knowingly, or in reckless disregard of accepted practices. In fact, Dr. Troian  
17 presented authoritative evidence that APS routinely accommodates its conference participants by  
18 permitting alterations to abstracts after submission and multiple talks by a single author. Dr.  
19 Gharib even conceded this fact during the alleged “Inquiry” meeting on December 14, 2012.

20 152. With respect to Charge 2, Dr. Troian produced 333 pages of evidence to the  
21 Committee that her ten-minute presentations at the APS conferences did not plagiarize Dr.  
22 Niavaranikeiri’s work, but the Investigation Committee found her guilty of this charge without  
23 applying a preponderance of the evidence standard to the evidence before it. In fact, there is no  
24 evidence that Dr. Troian used or referenced any of Dr. Niavaranikeiri’s work in her abstract or  
25 her ten minute presentations. The Committee also failed to find that Dr. Troian’s conduct related  
26 to Charge 2 represented a significant departure from accepted practices in her field or that she  
27 acted intentionally, knowingly, or in reckless disregard for accepted practices.

28 153. Dr. Troian submitted a 17-page appeal to Dr. Hunt challenging the Committee’s

1 findings after it issued its Final Report. Neither Dr. Hunt nor Dr. Stolper referred to any of Dr.  
2 Troian's evidence or the appropriate evidentiary standards in affirming the Committee's findings.

3 **F. Caltech Denied Dr. Troian a Proper Appeal.**

4 154. The Misconduct Policy provides that a charged party may appeal an adverse  
5 decision "to the President on grounds of improper procedure or capricious or arbitrary decision  
6 based on the evidence in the record," but any appeals process must be "separated organizationally  
7 from the inquiry and investigation." Faculty Handbook at 7/4.

8 155. Dr. Stolper drew up the charges against Dr. Troian and hand-picked the  
9 Investigation Committee. The Policy therefore prohibited him from acting as the individual to  
10 whom Dr. Troian appealed, even though he was Interim President at the time. Further, Dr. Stolper  
11 could not render a fair decision in Dr. Troian's appeal since he admitted that he had pre-  
12 determined her guilt before she was charged. His bias was evident in his conduct during her  
13 appeal on March 18, 2014, including his prohibition against making a record of her appeal, which  
14 violated the Misconduct Policy's admonition that "all stages of the procedure should be fully  
15 documented," Id. at 7/1, his statements that he did not "care about the facts," and his refusal to  
16 review the Committee's and Dr. Hunt's findings.

17 **G. Caltech Violated Dr. Troian's Right to be Treated with Justice and**  
18 **Fairness.**

19 156. The Misconduct Policy requires that "[a]ll parties must be treated with justice and  
20 fairness." Id. Caltech deprived Dr. Troian of just and fair treatment by denying her the benefit of  
21 enumerated rights in the Misconduct Policy and by subjecting her to an inherently unfair process  
22 pre-determined to find her guilty.

23 157. From the initiation of the investigation in February 2013 through the date of her  
24 hearing on May 8, 2013, those investigating Dr. Troian, including Dr. Stolper, repeatedly told her  
25 that the charges against her arose from a complaint Caltech received from Dr. Niavaranikeiri, Dr.  
26 Troian's former postdoc. In July 2013, when Dr. Troian received the Investigation Committee's  
27 Draft Report, she learned for the first time that the Committee had never interviewed Dr.  
28 Niavaranikeiri, and that Dr. Niavaranikeiri had never presented any evidence of plagiarism or



1 misappropriation to the Committee. She also learned for the first time that Drs. Gharib and  
2 Rosakis, not Dr. Niavaranikeiri, had pressured Dr. Stolper to initiate the investigation.

3 158. The Draft Report revealed that six weeks before the APS DFD conference, Dr.  
4 Niavaranikeiri had emailed Caltech to inquire about the identity of the first author on Dr.  
5 Troian's 2012 APS abstract. The email contained no accusation that Dr. Troian had engaged in  
6 plagiarism or that she had misappropriated Dr. Niavaranikeiri's work. Dr. Gharib received the  
7 inquiry on or about October 3, 2012. Rather than speak to Dr. Troian about the identity of M.  
8 Pucci upon receipt of Dr. Niavaranikeiri's inquiry, Dr. Gharib concealed its existence from Dr.  
9 Troian, and requested that Dr. Niavaranikeiri provide additional information on the work that she  
10 had performed with Dr. Troian. Dr. Gharib then waited until after Dr. Troian delivered her ten-  
11 minute presentation at the November APS DFD conference to bring false charges of misconduct  
12 against her.

13 159. Drs. Gharib, Rosakis, and Stolper used Dr. Niavaranikeiri as the straw-man  
14 complainant so they could institute proceedings against Dr. Troian in an effort to push her out of  
15 Caltech for cooperating with the FBI. Dr. Niavaranikeiri was never interviewed and did not  
16 serve as a witness in the Committee's investigation.

17 160. Caltech denied Dr. Troian fairness and justice by willfully misrepresenting or  
18 ignoring more than 500 pages of exculpatory evidence she presented to the Investigation  
19 Committee.

20 161. In April 2013, before the Committee issued its Draft Report, Dr. Troian submitted  
21 evidence that she had begun her own independent thermal slip simulations in June 2012 and was  
22 collecting her own data by July 2012, nearly one month before she submitted the 2012 APS  
23 abstract. The Committee nevertheless falsely stated in its Draft Report that Dr. Troian did not  
24 begin her own simulations until after she had submitted the abstract in August 2012. The  
25 Committee cited this false factual allegation to support its erroneous conclusion that Dr. Troian  
26 had relied on Dr. Niavaranikeiri's work for the 2012 APS abstract. Dr. Troian highlighted the  
27 Committee's factual misrepresentation in her August 19, 2013 rebuttal to the Draft Report, but the  
28 Committee failed to correct it. Instead, in the Final Report, the Committee falsely stated that Dr.

1 Troian had no independent results available to her by the time she submitted the 2012 APS  
2 abstract and used this knowing misrepresentation to support its conclusion that Dr. Troian had  
3 based her abstract on Dr. Niavaranikeiri's work.

4 162. Dr. Troian submitted 198 pages of evidence in advance of the hearing on May 8,  
5 2013. The Committee refused Dr. Troian's efforts to review this evidence during the hearing,  
6 even though it provided answers to numerous questions the Committee posed to her. The  
7 Committee also omitted 70 pages of exhibits that Dr. Troian submitted to rebut the Draft Report  
8 from the record accompanying the Final Report, and upon information and belief, did not review  
9 those documents. Dr. Troian's evidence definitively demonstrated that her results were consistent  
10 with over 30 years of results from the scientific literature. Conversely, Dr. Niavaranikeiri's  
11 results were inconsistent with fundamental laws of physics, which explained why Dr.  
12 Niavaranikeiri did not warrant acknowledgement in Dr. Troian's APS abstracts or presentations.  
13 Dr. Troian's evidence was uncontroverted, but the Committee nevertheless concluded that Dr.  
14 Niavaranikeiri warranted acknowledgement, which demonstrated that the Committee willfully  
15 disregarded Dr. Troian's evidence.

16 163. Dr. Troian also provided to the Committee 70 examples of changes listed in the  
17 2012 APS DFD Program Corrigenda, including changes to abstract authors before and after the  
18 conference. Two of these changes resulted in the same researcher presenting twice at the  
19 conference, which is precisely what occurred in Dr. Troian's case. This evidence definitively  
20 proved that APS approved such changes, but the Committee failed to acknowledge this evidence  
21 in finding that Dr. Troian used a placeholder name to circumvent APS rules.

22 164. Dr. Stolper explicitly stated that he did not "care about the facts" during Dr.  
23 Troian's appeal.

24 165. Caltech further denied Dr. Troian a just and fair investigation by crediting the  
25 testimony of witnesses it knew were biased against her, including Dr. Manoochehr Koochesfahani,  
26 who is a longtime friend and collaborator of Dr. Gharib and who obtained his Ph.D. in Aeronautics  
27 from Caltech in 1983, where Dr. Dimotakis was his thesis supervisor.

28 166. Dr. Fisher-Adams's role in the investigation also violated Dr. Troian's right to just

1 and fair treatment. The Misconduct Policy's provision on Inquiries states that "every effort should  
2 be made to make personal legal counsel unnecessary for either complainant or respondent at this  
3 and all other stages." Faculty Handbook at 7/2.

4 167. Caltech denied Dr. Troian the use of counsel throughout the investigation, despite  
5 her requests, but it used Dr. Fisher-Adams, a licensed and active attorney in the State of California,  
6 to advocate on behalf of Dr. Gharib and Dr. Stolper.

7 168. Dr. Troian challenged Dr. Fisher-Adams' role in the investigation from the start  
8 because Dr. Fisher-Adams reported directly to Dr. Gharib, and therefore, had a conflict of interest  
9 in violation of Caltech policy. Caltech nevertheless insisted on Dr. Fisher-Adams's participation  
10 and falsely claimed she was merely providing "administrative support" to the Investigation  
11 Committee.

12 169. In fact, Dr. Fisher-Adams advocated on behalf of the Caltech administrators who  
13 brought the charges against Dr. Troian throughout the investigation. When Dr. Troian met with  
14 Dr. Fisher-Adams for the first time on March 1, 2013, Dr. Fisher-Adams asked Dr. Troian hostile  
15 questions about the charges against her under the pretext that her answers would help Dr. Fisher-  
16 Adams organize documents for the Committee. When Dr. Troian explained to Dr. Fisher-Adams  
17 that it would take her some time to collect the evidence the Committee sought, Dr. Fisher-Adams  
18 accused Dr. Troian of stonewalling in an effort to manipulate evidence. During Dr. Troian's  
19 hearing before the Investigation Committee on May 8, 2013, Dr. Fisher-Adams twice interrupted  
20 the proceedings, once to defend Caltech's actions in denying Dr. Troian an Inquiry, and a second  
21 time to curtail discussion about the nature of Dr. Niavaranikeiri's alleged complaint against Dr.  
22 Troian, which she and Caltech purposefully obfuscated throughout the investigation. Dr. Fisher-  
23 Adams was also responsible for transcribing the hearing proceedings, which upon and information  
24 and belief were audio recorded. Dr. Troian was never given a copy or transcript of the audio  
25 recording. The "transcript" Dr. Fisher-Adams made of the three hour hearing was an abbreviated  
26 and inaccurate 11-page summary that deliberately obscured Dr. Troian's statements and deleted or  
27 omitted facts helpful to Dr. Troian and damaging to Caltech.

28 170. Dr. Stolper's stated bias against Dr. Troian before the investigation began renders

1 Caltech's proceedings inherently unfair. In December 2012, before issuing the charging  
2 document, Dr. Stolper wrote the following to Dr. Troian:

3 [I]n my opinion, there can be no mitigation based on any circumstances I can  
4 currently envision (including those that you have offered related to your  
5 postdoctoral scholar) for having listed your cat as the first author on a submission  
6 for publication. There can be no interpretation other than this was a purposeful  
7 misrepresentation of the people involved in the work that you presented. As  
8 academics and scientists such behavior cannot be sanctioned; there is no middle  
9 ground when it comes to honest and accurate representation of our work and who  
10 is credited with having participated in it.

11 171. Despite Dr. Stolper's apparent and disqualifying bias against Dr. Troian, he was  
12 the official who drafted the charges against her, hand-picked the Investigation Committee, heard  
13 Dr. Troian's appeal, and adopted the Committee's findings against her as Caltech's final decision.

14 **Caltech's Additional, Ongoing Retaliation against Dr. Troian.**

15 172. Caltech administrators continue to obstruct Dr. Troian's work and to impede her  
16 career, and have done so since she first reported Dr. Gat's illegal activity in 2010.

17 173. On September 18, 2013, seventeen days after the Investigation Committee issued  
18 its Final Report, Caltech Property Services sent a notice to eleven administrators and staff  
19 implying that Dr. Troian was responsible for a \$378,239 missing piece of laboratory equipment.  
20 Caltech officials later acknowledged that the equipment had never belonged to Dr. Troian, but did  
21 not retract the memos containing the false statements.

22 174. In January 2014, Dr. Hunt ordered a doctoral student who had been working with  
23 Dr. Troian for over two years to exclude all research with Dr. Troian from his doctoral thesis. Dr.  
24 Hunt's actions were highly unusual, because Dr. Troian was the student's doctoral co-advisor.

25 175. Caltech deliberately excluded Dr. Troian from all meetings with the Engineering  
26 and Applied Sciences (EAS) Visiting Committee during their March 2014 visit to Caltech, even  
27 though Caltech invited her to meet with that Committee during their last visit in 2007. The  
28 Committee consists of prominent Caltech trustees, business leaders, and faculty from leading  
universities who visit Caltech every five years and advise the President, Provost, and EAS  
Division Chair. Dr. Rosakis invited many of Troian's faculty colleagues to meet with Committee

1 members during their 2014 visit, which allowed them to shape the division's agenda, but Dr.  
2 Rosakis deliberately excluded Dr. Troian.

3 176. Caltech also deliberately excluded Dr. Troian from a keynote Fall 2014  
4 departmental fundraising event, "Applied Physics and Materials Science in the 21st century," even  
5 though Dr. Troian's research encompasses the topical areas discussed and she requested to  
6 participate. Nearly every senior faculty member in Dr. Troian's field except her presented. Dr.  
7 Troian's exclusion denied her the opportunity to advertise her work to prospective donors,  
8 alumnae, business leaders, heads of funding agencies, and the Director of DARPA.

9 177. Caltech has systematically prevented Dr. Troian from serving on administrative,  
10 advisory, and honorific committees on campus since the summer of 2010, when she first reported  
11 Dr. Gat's illegal activity. Service on such committees is vital to faculty members' visibility on  
12 campus, enhances opportunities for scientific collaboration and funding requests, and is a factor  
13 that Drs. Rosakis and Stolper consider in awarding EAS faculty members annual pay raises. As a  
14 senior tenured faculty member with extensive experience in both industry and academia, and as a  
15 frequent advisor and consultant to universities, government, and industry, Dr. Troian qualifies to  
16 serve on Caltech committees, and she has consistently requested to do so. Drs. Rosakis and  
17 Stolper refuse to appoint her or to promote her to any administrative posts.

18 178. On information and belief, Dr. Troian's annual salary increases have been less  
19 than those of her peers since she reported Dr. Gat's illegal activity to the FBI.

20 179. On information and belief, Caltech denied Dr. Troian a courtesy appointment in  
21 the Physics Department in 2011, though she clearly qualified for the appointment, and it is a  
22 routine matter for Caltech faculty to receive courtesy appointments.

23 180. As a result of the inordinate amount of time and energy Dr. Troian has spent  
24 defending herself against Caltech's baseless charges and retaliation, she has not been able to  
25 finalize research she would have otherwise finalized; has had to decline numerous outside  
26 consulting opportunities which she would have otherwise assumed; and has had to decline  
27 numerous invitations to attend workshops, lectures, and roundtables, which she would have  
28 otherwise accepted, including an invitation to spend three-and-a-half months at the Isaac Newton

1 Institute for Mathematical Sciences in Cambridge, England, an invitation by the Editors in Chief  
2 of the Annual Review of Condensed Matter Physics to write a review article, and an invitation by  
3 the Chairman and Editor-in-Chief of World Scientific Publishing Company to write a volume of  
4 lecture notes.

5 **Caltech Recently Padded Dr. Troian's Personnel File with Falsified**  
6 **Documents in Preparation for this Lawsuit.**

7 181. On April 9, 2013, Caltech issued Dr. Troian's former counsel a copy of her  
8 personnel file, at his request.

9 182. At that time, Dr. Troian discovered that Drs. Gharib and Rosakis had placed in the  
10 file a signed disciplinary letter dated July 30, 2012, which falsely stated that three postdocs had  
11 "serious complaints" against her and that these alleged complaints were the topic of their July 18,  
12 2012 meeting. The letter omitted the fact that Drs. Gharib and Rosakis had used that meeting to  
13 question and rebuke Dr. Troian for speaking with the FBI and for reporting Dr. Gat's ITAR  
14 violations.

15 183. On September 20, 2014, Caltech again issued Dr. Troian a copy of her personnel  
16 file, upon her request.

17 184. The September 2014 file contains various additional falsified documents that  
18 predate April 2013, when Caltech last released her file.

19 185. Caltech has padded Dr. Troian's personnel file with false, negative information  
20 about her in preparation for this lawsuit.

21 186. The September 2014 file contains a false summary by Drs. Gharib and Rosakis of  
22 their December 14, 2012 meeting with Dr. Troian, which falsely attributes statements to her, and  
23 claims: "this latest episode is indicative of ongoing concerns about Prof. Troian's professional  
24 behavior . . . This is not an isolated event . . . we recommend that the Provost assemble a  
25 committee to look into her actions in light of potential faculty misconduct." This document  
26 definitively demonstrates that it was Drs. Gharib and Rosakis who initiated the false charges of  
27 misconduct against Dr. Troian.

28 187. The newly-released file also includes a document, dated 2007, that contains wholly

1 false allegations of Dr. Troian's "abuse" of Caltech staff. Neither of these false documents were in  
2 Dr. Troian's personnel file as of April 2013.

3 **Dr. Troian Has Suffered Emotional and Physical Harm as a Result of**  
4 **Caltech's Retaliation Against Her.**

5 188. Due to Caltech's escalating harassment against her, in July 2012, Dr. Troian began  
6 experiencing severe chest pains and underwent several cardiac tests in September 2012.

7 189. Her cardiologist concluded the pain was caused by severe anxiety and sleep loss.  
8 The pain became progressively more severe and in November 2013 she underwent an endoscopy  
9 and was diagnosed with severe esophageal and stomach ulcers.

10 190. Dr. Troian now requires daily multiple prescription medications, but the condition  
11 has not abated. Her doctor recently indicated that she will likely need surgery to alleviate the pain  
12 and progression of this disease.

13 191. Caltech's four years of retaliation and harassment have also caused Dr. Troian  
14 severe anxiety, stress, sadness and depression, sleep disturbances and other physical ailments.

15 **COUNT I – RETALIATION IN VIOLATION OF CAL. LABOR CODE § 1102.5(b)**

16 192. Plaintiff incorporates and alleges paragraphs 1 through 191 above as if restated  
17 herein.

18 193. Cal. Labor Code § 1102.5 prohibits an employer from retaliating against an  
19 employee for disclosing to a government or law enforcement agency, or to a person with authority  
20 over the employee or another employee who has the authority to investigate, discover, or correct  
21 the violation or noncompliance, information the employee reasonably believes discloses a  
22 violation or noncompliance with a local, state or federal statute, rule, or regulation.

23 194. Caltech violated Labor Code § 1102.5 by retaliating against Dr. Troian for  
24 disclosing what she reasonably believed to be violations of federal export control laws, including  
25 ITAR violations, by Dr. Amir Gat to the FBI and to Caltech and JPL officials.

26 195. Dr. Troian reasonably believed that she was disclosing Dr. Gat's violations of  
27 noncompliance with state or federal statutes, rules, or regulations, when she told Caltech and JPL  
28 officials and the FBI about Dr. Gat's apparent ITAR violations.

1           196.     Caltech had knowledge of Dr. Troian's internal disclosures regarding Dr. Gat  
2 because she made them to Caltech officials. Caltech clearly also had knowledge of Dr. Troian's  
3 disclosures to the FBI about Dr. Gat. Drs. Gharib, Rosakis, and Stolper repeatedly questioned,  
4 threatened, and rebuked Dr. Troian about her communications with the FBI regarding Dr. Gat,  
5 beginning two weeks after her second conversation with the FBI.

6           197.     Based on Dr. Troian's disclosures of Dr. Gat's apparent illegal activity, Caltech  
7 engaged in a campaign of retaliation against Dr. Troian in an effort to drive her out of Caltech and  
8 ruin her career. The retaliation included, inter alia, placing multiple false letters of discipline in  
9 her file; threatening to bar her from hiring future postdoctorate students; falsely accusing her of  
10 research misconduct; refusing to follow the Handbook's procedure for investigating research  
11 misconduct and instituting sham proceedings that violated her rights as a faculty member; issuing  
12 false findings of wrongdoing against her and imposing discipline against her; falsely accusing her  
13 of misappropriating lab equipment; thwarting her participation in campus committees, events, and  
14 lectures; denying her over a million dollars in grant funds; causing her to waste significant time  
15 and money to fight Caltech's baseless allegations against her; and generally intimidating her and  
16 threatening her employment at Caltech.

17           198.     At all times relevant to this Complaint, Caltech was Dr. Troian's employer for the  
18 purposes of Cal. Labor Code § 1102.5(b).

19           199.     At all times relevant to this Complaint, Caltech employed each person who  
20 retaliated against Dr. Troian, including but not limited to Dr. Stolper, Dr. Gharib, Dr. Rosakis, Dr.  
21 Fisher-Adams, Dr. Hunt, Ms. Stratman, and Ms. Epallé.

22           200.     As a direct and proximate result of Caltech's conduct, Dr. Troian has suffered  
23 special damages in the form of lost earnings, benefits and/or out-of-pocket expenses in an amount  
24 according to proof at the time of trial. As a further direct and proximate result of Caltech's  
25 conduct, Dr. Troian will suffer additional special damages in the form of lost future earnings,  
26 benefits, and/or other prospective damages in the amount according to proof at the time of trial.

27           201.     As a further direct and proximate result of Caltech's conduct, Dr. Troian has  
28 suffered mental and emotional pain, distress and discomfort, all to her detriment and damage in



1 amounts not fully ascertained but within the jurisdiction of this court and subject to proof at the  
2 time of trial.

3 202. Caltech's actions were intentional and were taken in willful and wanton disregard  
4 of Dr. Troian's legal rights, and were taken specifically to injure her for her protected disclosure of  
5 apparent illegal activity at Caltech, thereby warranting punitive damages against Caltech.

6 **COUNT II – REPRESENTATIVE ACTION FOR CIVIL PENALTIES PURSUANT TO**  
7 **THE PRIVATE ATTORNEY GENERAL ACT (PAGA),**  
8 **CAL. LABOR CODE § 2698-2699.5**

9 203. Plaintiff incorporates and alleges each of the factual allegations stated in  
10 paragraphs 1 through 202 above as if restated herein.

11 204. Plaintiff is an "aggrieved employee" within the meaning of California Labor Code  
12 § 2699(c), and a proper representative to bring a civil action on behalf of herself and other current  
13 and former employees of Defendant pursuant to the procedures specified in California Labor Code  
14 § 2699.3, because Plaintiff was employed by Defendant, and Defendant committed the alleged  
15 California Labor Code violations against Plaintiff. Pursuant to the California Private Attorneys  
16 General Act of 2004 ("PAGA"), Labor code §§ 2698-2699.5, Plaintiff seeks to recover civil  
17 penalties, including but not limited to penalties under California Labor Code § 2699 from  
18 Defendant in a representative action for the violations set forth above, including but not limited to  
19 violations of California Labor Code § 1102.5. Plaintiff is also entitled to an award of reasonable  
20 attorneys' fees and costs pursuant to California Labor Code §2699(g)(1).

21 **COUNT III – PETITION FOR WRIT OF ADMINISTRATIVE MANDATE UNDER**  
22 **CODE OF CIVIL PROCEDURE § 1094.5**

23 205. Plaintiff incorporates and alleges each of the factual allegations stated in  
24 paragraphs 1 through 204 above as if restated herein.

25 206. The final decision Caltech issued against Dr. Troian upon conclusion of its  
26 investigation into allegations of research misconduct impairs Dr. Troian's fundamental vested  
27 right to continued employment free from retaliation for disclosing apparent violations of law.  
28 Therefore the Court must exercise its independent judgment to resolve issues of fact.

1           207.     Dr. Troian exhausted her available administrative remedies by appealing the  
2 Committee's decision to Dr. Hunt and to Dr. Stolper.

3           208.     The decision Defendant issued against Dr. Troian is invalid under Code of Civil  
4 Procedure § 1094.5 for the following reasons:

5           **(a)     Defendant failed to grant Dr. Troian a fair hearing and committed**  
6           **prejudicial abuse of discretion by failing to proceed in a manner required by**  
7           **law in the following ways:**

8           (1)     Caltech denied Dr. Troian an Inquiry, including an opportunity to present  
9 evidence, on the charges it levied against her and failed to issue a written "report  
10 of the inquiry" in violation of the Misconduct Policy set forth in the Faculty  
11 Handbook.

12          (2)     Caltech appointed an Investigation Committee lacking technical  
13 competence in Dr. Troian's field in violation of the Misconduct Policy.

14          (3)     Caltech permitted biased individuals, who had predetermined her guilt, to  
15 serve on the Investigation Committee in violation of the Misconduct Policy's  
16 admonition that any "semblance of conflict of interest must rigorously be avoided  
17 at all stages."

18          (4)     Caltech's investigation exceeded the scope of the charges against Dr.  
19 Troian insofar as Caltech used the investigation to identify additional charges of  
20 alleged misconduct related to her 2013 APS abstract and failed to give Dr. Troian  
21 notice of the additional allegations in violation of the Misconduct Policy.

22          (5)     Caltech issued a decision and findings against Dr. Troian without applying  
23 the proper evidentiary standards stated in the Misconduct Policy.

24          (6)     Caltech failed to separate the appeal process from the investigation stage  
25 by permitting Dr. Stolper to be the individual who drafted the charges against Dr.  
26 Troian and the official to whom she appealed, in violation of the Misconduct  
27 Policy.

28          (7)     Caltech prevented Dr. Troian from being "treated with justice and fairness"

1 in violation of the Misconduct Policy by violating the enumerated provisions of  
2 the policy, and (i) permitting Drs. Gharib, Rosakis, and Stolper to use the policy to  
3 harass and retaliate against Dr. Troian; (ii) knowingly misrepresenting and  
4 willfully ignoring exculpatory evidence she presented; (iii) crediting the testimony  
5 of witnesses it knew were biased against her; (iv) permitting Dr. Fisher-Adams to  
6 act as Caltech's advocate during the investigation while denying Dr. Troian  
7 counsel; and (v) permitting Dr. Stolper to be involved at multiple stages of the  
8 process even though he stated his bias against her from the beginning.

9 **(b) Defendant committed prejudicial abuse of discretion in that its decision is not**  
10 **supported by the findings because:**

11 (1) In Finding I-1 of the Final Report, the Committee found that Dr. Troian  
12 listed "Pucci" as first author on her 2012 APS abstract "to ensure that the  
13 presentation could be given, regardless of the availability of a substantive  
14 replacement for [Dr. Niavaranikeiri]." Finding I-1 is not supported by the weight  
15 of the evidence because Dr. Troian testified that she included "Pucci" as first  
16 author on the APS 2012 Abstract as a placeholder while she sought another  
17 collaborator and presented evidence that in the months between submitting the  
18 abstract and giving the presentation she actively sought an assistant. There is no  
19 credible evidence in the record that contradicts Dr. Troian's testimony.

20 (2) In Assessment I-1 of the Final Report, the Committee found that listing  
21 "Pucci" as an author on the 2012 APS abstract "constituted a circumvention of  
22 APS rules." Assessment I 1 is not supported by the weight of the evidence  
23 because Dr. Troian testified and presented evidence that (i) conference attendees  
24 are able to and often do revise APS abstracts, including author lists, through the  
25 date of a conference and after; (ii) individuals listed as first authors on abstracts  
26 are often not the individuals who present the material at the conference; (iii) on the  
27 first day of the 2012 conference, she informed APS that she had been unable to  
28 find a collaborator and APS still permitted her to give her presentation; and (iv)

1 APS ultimately removed the name “Pucci” from the abstract after a phone call  
2 from Dr. Troian. There is no credible evidence in the record to contradict Dr.  
3 Troian’s testimony and the supporting evidence she presented.

4 (3) In Finding I-2 and Assessment I-2 of the Final Report, the Committee  
5 found that Dr. Troian may have manipulated author lists at the 2013 APS  
6 conference “for rule-evasion purposes.” Finding I-2 and Assessment I-2 are not  
7 supported by the weight of the evidence, because the evidence Dr. Troian  
8 presented demonstrates definitively that she complied with APS procedures for  
9 listing and modifying authors on abstracts for the 2013 APS conference. There is  
10 no credible evidence in the record to contradict her evidence.

11 (4) In Assessment II-1 of the Final Report, the Committee found that Dr.  
12 Niavaranikeiri merited acknowledgement in Dr. Troian’s 2012 and 2013 APS  
13 presentations. Assessment II-1 is not supported by the weight of the evidence  
14 because Dr. Troian presented uncontroverted evidence that (i) Dr. Troian engaged  
15 in independent research using computing algorithms, methods of analysis, and  
16 hardware different from those that Dr. Niavaranikeiri used to arrive at the  
17 conclusions she (Dr. Troian) presented at the 2012 and 2013 APS conferences; (ii)  
18 the findings that Dr. Niavaranikeiri reported during her employment at Caltech  
19 contradicted the findings Dr. Troian presented at the 2012 and 2013 APS  
20 conferences and thirty years of research in the field; (iii) general similarities  
21 between plots appearing in Dr. Niavaranikeiri’s notebooks and lab materials and  
22 Dr. Troian’s abstracts and presentations were entirely attributable to the fact that  
23 Dr. Troian instructed Dr. Niavaranikeiri to reproduce plots that had been  
24 documented in the scientific literature for over 30 years in order to confirm Dr.  
25 Niavaranikeiri’s computer simulations were obeying the laws of physics. This  
26 evidence proved that Dr. Niavaranikeiri made no contributions, unique or  
27 otherwise, to the findings Dr. Troian presented at the 2012 and 2013 APS  
28 conferences that would entitle her to acknowledgment or attribution. There is no

1 credible evidence in the record to contradict Dr. Troian's evidence.

2 (5) In Finding II-2 and Assessment II-2 of the Final Report, the Committee  
3 found that the claims in Dr. Troian's 2012 and 2013 APS abstracts, which were  
4 virtually identical, appeared to be based on collaborative work between Dr. Troian  
5 and Dr. NiavaraniKheiri and that Dr. NiavaraniKheiri "merited an invitation to co-  
6 authorship in both submitted abstracts." Finding and Assessment II-2 are not  
7 supported by the weight of the evidence because the evidence Dr. Troian  
8 submitted demonstrated that (i) both APS abstracts primarily summarized  
9 historical findings in the field; (ii) both abstracts promised results consistent with  
10 thirty years of published literature; and (iii) Dr. Troian obtained her results, which  
11 were consistent with the published literature, without the assistance of Dr.  
12 NiavaraniKheiri, whose simulations yielded erroneous results.

13 (6) In Finding II-3 and Assessment II-3 of the Final Report, the Committee  
14 found that there were no results other than those obtained by Dr. NiavaraniKheiri  
15 available to Dr. Troian by the time she submitted the 2012 APS abstract, so the  
16 claims in the 2012 abstract were not based on Dr. Troian's independent work.  
17 Finding II-3 and Assessment II-3 are not supported by the weight of the evidence  
18 because Dr. Troian submitted definitive proof, which the Committee willfully  
19 ignored and failed to rebut, that she had achieved her own independent results by  
20 the time she submitted the 2012 APS abstract.

21 (7) In Finding IV and Assessment IV of the Final Report, the Committee  
22 found that Dr. Troian was not dissatisfied with Dr. NiavaraniKheiri's work until  
23 April 2012, and that Dr. NiavaraniKheiri's abrupt departure from Caltech in June  
24 "may explain, though not justify," Dr. Troian's decision not to acknowledge Dr.  
25 NiavaraniKheiri's contributions. Finding IV and Assessment IV are not supported  
26 by the weight of the evidence. Dr. Troian produced email correspondence and  
27 other material from September 2011 onwards that demonstrated her displeasure  
28 with Dr. NiavaraniKheiri's work and expressed her concern over the fact that Dr.

1 Niavaranikheiri was producing erroneous results. Moreover, Dr. Troian presented  
2 uncontroverted evidence that demonstrated definitively that Dr. Niavaranikheiri's  
3 findings contradicted Dr. Troian's findings and thirty years of research in the field.  
4 This evidence proved that Dr. Niavaranikheiri made no contributions to the  
5 findings Dr. Troian presented at the 2012 and 2013 APS conferences that would  
6 entitle her to acknowledgement or attribution. There is no credible evidence in the  
7 record that Dr. Niavaranikheiri warranted acknowledgement in Dr. Troian's APS  
8 materials.

9 209. Dr. Troian seeks a writ of administrative mandate under § 1094.5 because she does  
10 not have a plain, speedy, and adequate remedy in the ordinary course of the law.

11 210. In taking the actions against Dr. Troian alleged herein, Caltech acted frivolously,  
12 unreasonably, without foundation, in bad faith, and in violation of California Labor Code §1102.5.

13 211. Dr. Troian will request that Caltech prepare a true and correct copy of the  
14 administrative record. A true and correct copy of the record will be filed with the court before the  
15 hearing date.

16 **COUNT IV – PETITION FOR WRIT OF MANDATE UNDER**  
17 **CODE OF CIVIL PROCEDURE § 1085**

18 212. Plaintiff incorporates and alleges paragraphs 1 through 211 above as if restated  
19 herein.

20 213. Caltech charged Dr. Troian with research misconduct and initiated an investigation  
21 that resulted in findings and a final decision against her.

22 214. Caltech was required to follow the procedures set forth in the Misconduct Policy  
23 of the Faculty Handbook in making findings and reaching its final decision.

24 215. In making its findings and reaching its final decision against Dr. Troian, Caltech  
25 deliberately failed to follow or comply with the procedures of that Misconduct Policy in the  
26 Faculty Handbook.

27 216. Dr. Troian has exhausted her administrative remedies.

28 217. Dr. Troian seeks a writ of mandate under § 1085 because she does not have a

1 plain, speedy, and adequate remedy in the ordinary course of the law.

2 218. In taking the actions against Dr. Troian alleged herein, Caltech acted frivolously,  
3 unreasonably, without foundation, in bad faith, and in violation of California Labor Code §1102.5.

4 **COUNT V – BREACH OF CONTRACT**

5 219. Plaintiff incorporates and alleges paragraphs 1 through 218 above as if restated  
6 herein.

7 220. The terms of Dr. Troian’s employment with Caltech are governed, in part, by the  
8 policies and procedures contained in the Faculty Handbook.

9 221. Dr. Troian accepted employment with Caltech in reliance on the terms of the  
10 Faculty Handbook and has relied on said terms during her employment with Caltech.

11 222. Dr. Troian has abided by her obligations under the Faculty Handbook.

12 223. Caltech breached the terms of Dr. Troian’s employment with the Institute by  
13 disciplining her for conduct related to her research without following the procedures in the Faculty  
14 Handbook’s Misconduct Policy and by failing to comply with its Whistleblower Policy.

15 224. The Misconduct Policy requires that parties be treated with “justice and fairness.”  
16 Caltech violated this requirement by: (i) permitting Drs. Gharib, Rosakis, and Stolper to use the  
17 policy to harass and retaliate against Dr. Troian for disclosing Dr. Gat’s potentially illegal  
18 activities and cooperating with the FBI; (ii) knowingly misrepresenting and willfully ignoring  
19 exculpatory evidence that Dr. Troian presented; (iii) crediting the testimony of witnesses it knew  
20 were biased against her; (iv) permitting Dr. Fisher-Adams to act as Caltech’s advocate during the  
21 investigation while denying Dr. Troian counsel; and (v) permitting Dr. Stolper to be involved at  
22 multiple stages of the process even though he stated his clear bias against Dr. Troian from the  
23 beginning.

24 225. Caltech further violated the Misconduct Policy by: (i) denying Dr. Troian an  
25 Inquiry stage; (ii) failing to appoint a technically competent Investigation Committee; (iii) failing  
26 to cure the process of conflicts of interest; (iv) failing to give Dr. Troian notice of the charges  
27 against her; (v) failing to apply the appropriate standards to the evidence in the record; and (vi)  
28 failing to separate the appeals process from the investigation stage.

1           226.    The Faculty Handbook incorporates the Institute’s Whistleblower Policy by  
2 reference.

3           227.    The Institute’s Whistleblower Policy “prohibits retaliation against an individual  
4 who makes a good faith disclosure of suspected wrongful conduct.”

5           228.    In good faith, Dr. Troian disclosed to her superiors at JPL and Caltech, including  
6 Drs. Gharib, Rosakis, and Stolper, that Dr. Gat had violated federal law, federal regulations, the  
7 Technology Control Plan, and the Institute’s intellectual property policies. She also reported Dr.  
8 Gat’s apparent violations of the Technology Control Plan, federal law, and federal regulations to  
9 the FBI.

10          229.    Caltech breached the terms of Dr. Troian’s employment with the Institute by  
11 retaliating against her in violation of its Whistleblower Policy.

12          230.    After Dr. Troian disclosed Dr. Gat’s unlawful actions, Drs. Gharib, Rosakis, and  
13 Stolper engaged in a campaign of harassment and retaliation against her, which included a sham  
14 investigation that resulted in adverse findings and an adverse decision against her.

15          231.    Caltech’s breach of its contract with Dr. Troian has caused her permanent damage  
16 to her professional career and loss of financial benefits.

17                   **COUNT VI - BREACH OF IMPLIED COVENANT OF GOOD FAITH AND**  
18   **FAIR DEALING**

19          232.    Plaintiff incorporates as though restated each of the factual allegations stated in  
20 paragraphs 1 through 231 above.

21          233.    Dr. Troian’s employment contract with Caltech includes an implied covenant of  
22 good faith and fair dealing, which prohibits Caltech from subjecting Dr. Troian to unfair, arbitrary,  
23 or unlawful treatment.

24          234.    Caltech breached its duty of good faith and fair dealing to Dr. Troian by subjecting  
25 her to a sham investigation designed to result in false adverse findings against her so that Caltech  
26 could justify imposing discipline on her, in its effort to harm her reputation, damage her career,  
27 and drive her out of her job.

28          235.    Caltech further breached its duty of good faith and fair dealing by using its



1 investigative powers to retaliate against Dr. Troian after she lawfully disclosed Dr. Gat's actions,  
2 which she reasonably believed violated federal law and Caltech policy.

3 236. Caltech's breach of the implied covenant of good faith and fair dealing has caused  
4 Dr. Troian permanent damage to her professional career and loss of other financial benefits.

### 5 **REQUEST FOR RELIEF**

6 WHEREFORE, Plaintiff Sandra Troian, Ph.D. respectfully requests that this Court grant  
7 her the following relief:

8 1. Issue a declaratory judgment declaring that Caltech retaliated against Dr. Troian in  
9 violation of California Labor Code § 1102.5(b) and breached its contract with her;

10 2. Issue an injunction against Caltech to ensure that it will refrain from further  
11 retaliation against her and cease all disciplinary actions against her;

12 3. Issue a peremptory writ of mandate under CCP § 1094.5, or, alternatively CCP §  
13 1085, setting aside Caltech's findings and final decision on the charges against Dr. Troian;

14 4. Issue a statement of decision setting forth the Court's findings of fact and  
15 conclusions of law;

16 5. Expunge all falsified and disciplinary documents from Dr. Troian's personnel,  
17 faculty, and other related files;

18 6. Award Dr. Troian compensatory and consequential damages to redress injuries  
19 suffered as a result of the retaliation she has suffered, including loss of future earnings, pain and  
20 suffering, emotional distress, public humiliation, and damage to her professional reputation, in an  
21 amount appropriate to the proof presented at trial, in excess of \$25,000;

22 7. Award Dr. Troian punitive damages for Caltech's reckless disregard of, and  
23 callous indifference to, her rights in an amount appropriate to the proof presented at trial, in excess  
24 of \$25,000;

25 8. Award Dr. Troian statutory and civil penalties according to proof, including but  
26 not limited to all penalties authorized by the California Labor Code § 2699;

27 9. Award Dr. Troian the attorneys' fees and costs she has incurred in bringing this  
28 action pursuant to California Civil Code § 1021.5, California Labor Code § 2699, and any other

1 applicable provisions of law;

2 Grant such other relief as this court deems just and necessary.

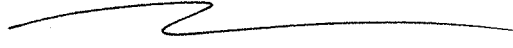
3 **DEMAND FOR JURY TRIAL**

4 Plaintiff / Petitioner demands a jury trial on all issues so triable.

5  
6 Dated: November 13, 2014

Respectfully submitted,  
HADSELL STORMER & RENICK LLP

7  
8

By   
Dan Stormer  
Attorneys for Plaintiff/Petitioner  
SANDRA M. TROIAN, Ph.D.

9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28



DEPARTMENT OF INDUSTRIAL RELATIONS  
Division of Labor Standards Enforcement  
Retaliation Complaint Investigation Unit  
605 West Santa Ana Blvd., Bldg. 28, Rm. 625  
Santa Ana, CA 92701  
Phone: 714-567-7217 Fax: 714-558-4587



April 25, 2014

Sandra Trojan  
784 S. Oakland Avenue  
Pasadena CA 91106

**Re: Case # 35427-STARCI – Sandra Trojan v. California Institute of Technology (Caltech)**

Dear name:

You have requested that DLSE provide you an “exhaustion letter” stating that you have exhausted administrative remedies and procedures. It has long been the DLSE’s position that exhaustion of Labor Code section 98.7 procedures is not required prior to raising a statutory retaliation claim in a civil action. The Legislature has now enacted changes to the Labor Code which clarify that exhaustion of administrative remedies or procedures is not required in such cases.

Based on your request, no further action is contemplated by this office because of your election to pursue your retaliation claim in court.

Very truly yours,

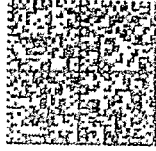
*Derek Park*

Senior Deputy Labor Commissioner  
Retaliation Complaint Investigation Unit

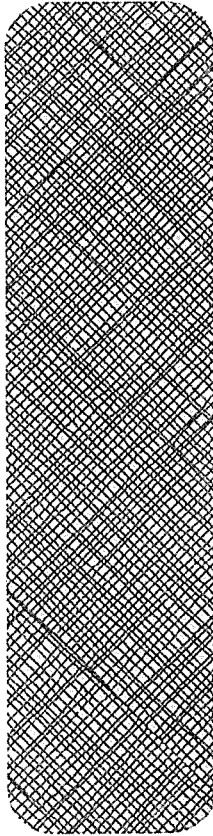
Cc: Lynne Bernabei, Esq.  
Bernabei & Wachtel, PLLC  
1775 t Street NW  
Washington DC 20009

DEPARTMENT OF INDUSTRIAL RELATIONS  
DIVISION OF LABOR STANDARDS ENFORCEMENT  
605 W. SANTA ANA BLVD.  
RM. 625 BLDG. 28  
SANTA ANA, CA 92701

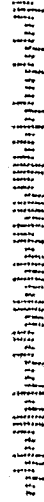
SANTA ANA  
CA 92701  
25 APR 14  
PM 4 L



UNITED STATES POSTAGE  
02 1A  
\$ 00.480  
0004800513 APR 25 2014  
MAILED FROM ZIP CODE 92701



91106372084







STATE OF CALIFORNIA  
Labor & Workforce Development Agency

GOVERNOR Edmund G. Brown Jr. • SECRETARY David Lanier

Agricultural Labor Relations Board • California Unemployment Insurance Appeals Board  
California Workforce Investment Board • Department of Industrial Relations  
Employment Development Department • Employment Training Panel • Public Employment Relations Board

JUL 09 2014

June 27, 2014

**CERTIFIED MAIL**

Bernabei & Wachtel, PLLC Attorneys at Law  
1775 T Street N.W.  
Washington, DC 20009

RE: Employer: California Institute of Technology  
RE: Employee(s): Sandra M. Troian  
RE: LWDA No: 16716

This is to inform you that the Labor and Workforce Development Agency (LWDA), in care of the Division of Labor Standards Enforcement (DLSE), received your notice of alleged Labor Code violations pursuant to Labor Code Section 2699, postmarked May 27, 2014, and after review, does not intend to investigate the allegations.

As a reminder to you, the provisions of Labor Code Section 2699(i) provides that "...civil penalties recovered by aggrieved employees shall be distributed as follows: 75 percent to the LWDA for enforcement of labor laws and education of employers and employees about their rights and responsibilities under this code." Labor Code Section 2699(l) specifies "[T]he superior court shall review and approve any penalties sought as part of a proposed settlement agreement pursuant to this part."

Consequently, you must advise DLSE of the results of the litigation, and forward a copy of the court judgment or the court-approved settlement agreement. Please be certain to reference the above LWDA assigned case number in any future correspondence.

Sincerely,

Mark Woo-Sam  
General Counsel

Cc: California Institute of Technology  
1200 E. California Blvd., M/C 108-31  
Pasadena, CA 91125

STATE OF CALIFORNIA  
DEPARTMENT OF INDUSTRIAL RELATIONS  
DIVISION OF LABOR STANDARDS ENFORCEMENT

**CERTIFICATION OF SERVICE BY MAIL**  
**(C. C. P. 1013A)**

I, Belle Macaranas, do hereby certify that I am a resident or employed in the county of San Francisco. I am over 18 years of age, not a party to the within action, and that I am employed at the business address below:

DEPARTMENT OF INDUSTRIAL RELATIONS  
DIVISION OF LABOR STANDARDS ENFORCEMENT  
455 Golden Gate Avenue, 9<sup>th</sup> Floor  
San Francisco, CA 94102

On 7/3/2014, I served the within "Do Not Investigate" letter by placing a true copy thereof in an envelope addressed as follows:

Bernabei & Wachtel, PLLC  
1775 T Street NW  
Washington DC 20009  
LWDA #16716

Which envelope was then sealed with postage and certified mail fees, (if applicable) fully prepaid thereon, deposited in the United States mail by

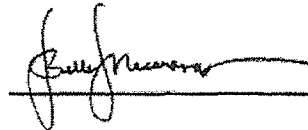
       Ordinary first class mail

  X   Certified Mail

I DECLARE UNDER PENALTY OF PERJURY THAT THE FOREGOING IS TRUE AND CORRECT.

Executed on 7/3/2014  
at San Francisco, California.

DLSE 544



A handwritten signature in black ink, appearing to read "Belle Macaranas", is written over a horizontal line.



VERIFICATION

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28

**VERIFICATION**

I, Sandra Troian, am the plaintiff in the action titled *Sandra Troian v. California Institute of Technology*. I declare under penalty of perjury that the facts alleged in the foregoing document are true and correct to the best of my information and belief. Executed in Pasadena, California, on this 12<sup>th</sup> day of November, 2014.



\_\_\_\_\_  
Sandra Troian