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20
21 **SUPERIOR COURT OF THE STATE OF CALIFORNIA**
22 **FOR THE COUNTY OF LOS ANGELES**
23 **UNLIMITED JURISDICTION**

24 SANDRA TROIAN, Ph.D.,

25 Plaintiff

26 vs.

27 CALIFORNIA INSTITUTE OF
28 TECHNOLOGY,

Defendant.

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
2 follows:
3

4 **PRELIMINARY STATEMENT**

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

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

13 3. Dr. Troian seeks a peremptory writ of mandate under California Code of
14 Civil Procedure § 1094.5, or alternatively, California Code of Civil Procedure
15 § 1085, to void the erroneous findings and decision Caltech issued against her.

16 **PARTIES**

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

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

21 **JURISDICTION AND VENUE**

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

26 **EXHAUSTION OF ADMINISTRATIVE REMEDIES**

27 7. On April 17, 2014, Dr. Troian submitted a Retaliation Complaint against

1 Caltech to the California Department of Industrial Relations, Division of Labor
2 Standards Enforcement (“DLSE”) pursuant to Cal. Labor Code § 1102.5.

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

5 9. On May 27, 2014, Dr. Troian submitted a notice of retaliation to the
6 California Labor and Workforce Development Agency (“LWDA”) and to Defendant,
7 pursuant to California Labor Code § 2699.3.

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

10 **FACTUAL ALLEGATIONS**

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

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

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

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

21 14. Dr. Troian began her employment at Caltech in September 2006. Her
22 employment is governed by a contract between her and Caltech, executed on May 3,
23 2006, and by Caltech’s Faculty Handbook.

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

26 16. Dr. Troian has earned numerous awards for her research and teaching
27 from the National Science Foundation, the American Physical Society, the Caltech

1 Moore Distinguished Scholar program, and Princeton and Caltech. She has served on
2 numerous editorial, executive, and advisory boards including the Defense Sciences
3 Research Council, the Annual Reviews of Fluid Mechanics, the Physics of Fluids, the
4 Kavli Institute for Theoretical Physics, the Microdevices Laboratory of the Jet
5 Propulsion Laboratory, the Max-Planck-Institut für Dynamik und Selbstorganisation,
6 the Society of Engineering Science, Inc., and the Institute for Defense Analysis. She
7 has also worked in industry, and consults for government and private sector
8 organizations.

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

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

18
19 **Dr. Troian Reported Apparent Illegal Activity by Her Postdoctoral Scholar, Dr.**
20 **Amir Gat, to Caltech, but Caltech Refused to Take Action.**

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

25 20. The Electro Spray Project was ITAR-restricted, which meant that Dr.
26 Troian and all other project researchers could not divulge or export any project-
27 related technical data to foreign end users or foreign destinations without U.S.

1 government authorization.

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

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

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

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

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

12 26. Both Dr. Troian and Dr. Gat signed a Technology Control Plan (“TCP”)
13 and addendum governing the Electrospray Project. In so doing, they certified their
14 understanding of their obligations not to disclose ITAR-restricted technical data to
15 foreign persons or foreign countries without prior approval from the U.S. Department
16 of State and that failure to comply with this obligation could subject them to criminal
17 fines and penalties.

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

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

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

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

27 31. Dr. Gat also repeatedly entered erroneous numbers into the design

1 software code when running project simulations, despite clear instructions from Dr.
2 Troian and JPL researchers on which numbers to use.

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

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

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

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

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

18 37. On June 3, 2010, Dr. Troian found Dr. Gat wandering alone,
19 unauthorized, in one of her access-restricted experimental laboratories. Dr. Gat
20 explained that Dr. Weihs had recommended that he "look around" to see what other
21 aerospace projects were ongoing at Caltech in collaboration with JPL. Dr. Gat said
22 that he was hoping that the Israel Institute of Technology would hire him in the
23 future, after he left the United States and returned to Israel.

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

27 39. On June 4, 2010, Dr. Troian met with EAS Division Administrator
28

1 Marionne Epallé and specifically requested that Ms. Epallé document Dr. Gat's
2 apparent TCP and ITAR violations. On June 14, 2010, Dr. Troian contacted Ms.
3 Epallé and Dr. Rosakis again reiterating her concerns about Dr. Gat and requesting
4 that they be documented for the record.

5 40. At least two JPL supervisors also reported Dr. Gat's apparent illegal
6 activity to the JPL Special Programs Security Manager, who handles espionage
7 concerns.

8 41. To Dr. Troian's knowledge, Caltech did not investigate Dr. Gat or
9 otherwise take action in response to Dr. Troian's or other JPL supervisors'
10 complaints of Dr. Gat's TCP and ITAR violations.

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

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

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

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

25 46. On August 8, 2010, a week after Dr. Troian terminated Dr. Gat from the
26 Electrospray Project, she discovered that he had been posting literature pertaining to
27 the Project on a public web site since March 22, 2010, and that users worldwide were

1 linking to the site. Dr. Gat's more than 65 online postings were unauthorized and
2 revealed the key operating principle of the JPL micropropulsion device, which
3 violated ITAR and the TCP.

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

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

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

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

24 51. Dr. Gharib told Dr. Troian "It's not my business." He further told Dr.
25 Troian that he (Gharib) was "best friends" with Dr. Weihs, Dr. Gat's Ph.D. advisor in
26 Israel with whom Dr. Gat had admitted sharing ITAR-restricted information, and
27

1 that, as a favor to Dr. Weihs, he (Gharib) had already offered Dr. Gat a postdoctoral
2 research scholar position in his own research group since she had terminated him.

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

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

14 54. Dr. Gat worked in Dr. Gharib's research group at Caltech from August
15 2010 until July 2012.

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

19
20 **FBI Agents Approached Dr. Troian about Dr. Gat, and She Truthfully
21 Disclosed His Apparent Unlawful Activities.**

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

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

1 58. Dr. Troian responded to all of the FBI agents' questions truthfully. She
2 responded that she believed Dr. Gat had, in fact, violated federal export control laws
3 while at Caltech. The agents asked Dr. Troian if she had ever reported Dr. Gat and to
4 whom, and she replied that she had repeatedly voiced her concerns to Caltech
5 officials, including Drs. Gharib and Rosakis, and to JPL supervisors, but Caltech had
6 failed to investigate Dr. Gat. They asked Dr. Troian about Dr. Gat's whereabouts,
7 and she replied that he was still on campus, because Dr. Gharib had taken Dr. Gat
8 into his own research group immediately after she dismissed Dr. Gat from her own.
9 The agents asked why Dr. Gharib had hired Dr. Gat, and she told the agents about Dr.
10 Weihs's relationship with Dr. Gharib.

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

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

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

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

23 62. During the meeting, Drs. Gharib and Rosakis accused Dr. Troian of
24 calling the FBI to Caltech and pressured her to divulge the content of her
25 conversations with the FBI. Dr. Troian explained that the FBI had approached her
26 and asked about Dr. Gat. Drs. Gharib and Rosakis insisted that they knew that Dr.
27 Troian had called the FBI. They demanded: "How did they find out? How did they

1 know? And why him [Dr. Gat]?”

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

5 64. Dr. Gharib admitted that he knew Dr. Gat had spoken to Dr. Weihs about
6 the Electrospray Project. He insisted that Dr. Gat had “made a mistake” in violating
7 any laws. He stated that he had asked Dr. Gat about the violations and “he [Dr. Gat]
8 said ‘no’ and we accepted that.”

9 65. In this meeting, Drs. Rosakis and Gharib also falsely accused Dr. Troian
10 of mistreating former postdoctoral research scholars who had worked with her,
11 including Dr. Gat and Dr. Anoosheh Niavaranikheiri, a postdoc who worked under
12 Dr. Troian from June 2011 to June 2012.

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

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

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

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

24 70. On July 22, 2012, Dr. Troian wrote a letter to Dr. Stolper, Caltech’s
25 Provost, asking him to address Drs. Gharib’s and Rosakis’s harassment and baseless
26 allegations. Drs. Troian and Stolper met on July 30, 2012. At the outset of the
27 meeting, Dr. Stolper also accused Dr. Troian of calling the FBI. He stated that Ms.

1 Stratman and “many people” had personally informed him that she had called the
2 FBI.

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

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

13 73. That same day, Drs. Gharib and Rosakis placed a false disciplinary
14 warning in Dr. Troian’s personnel file without her knowledge. The warning stated
15 that three of her former postdoctoral research scholars — Drs. Gat, Niavaranikeiri,
16 and Dietzel — “had serious complaints about working with [her],” and that they
17 would bar her from hiring postdoctoral research scholars if one more complaint were
18 filed.

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

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

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

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

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

11 78. Dr. Niavaranikeiri’s simulations produced erroneous results. Dr. Troian
12 notified Dr. Niavaranikeiri of this on several occasions, beginning in November of
13 2011, but by May 2012, Dr. Niavaranikeiri had not been able to reproduce
14 successfully the results documented in scientific literature. As a result, Dr. Troian
15 began conducting her own computer simulations on the project, using different
16 computing algorithms, techniques, and hardware than Dr. Niavaranikeiri.

17 79. Dr. Niavaranikeiri abruptly left Caltech in early June 2012. Dr.
18 Niavaranikeiri never gave Dr. Troian notice or an explanation for why she never
19 returned to work, though she later told Dr. Gharib that she was having personal
20 problems and did not like the environment at Caltech. She never progressed enough
21 in her thermal slip simulations to work on the novel problems for which Dr. Troian
22 had hired her.

23 80. After Dr. Niavaranikeiri’s sudden departure, Dr. Troian began to look
24 for a new assistant on the project.

25 81. On August 2 , 2012, while still seeking a new assistant, Dr. Troian
26 submitted several online abstracts (approximately 200 words each) to present at the
27 2012 American Physical Society Meeting of the Division of Fluid Dynamics (“APS

1 DFD”) scheduled for November 2012.

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

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

10 84. One of Dr. Troian’s abstracts focused on the simulations she had been
11 conducting on thermal slip (“2012 APS abstract”). The abstract did not include Dr.
12 Niavaranikeiri’s name, because Dr. Niavaranikeiri’s results had not contributed to
13 Dr. Troian’s work on the topic.

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

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

27 87. By November 18, 2012, the date of the APS meeting, Dr. Troian had

1 been unable to find a new assistant and had finished her simulations just shy of the
2 meeting. She informed the APS meeting officials of this change and delivered the
3 ten-minute talk herself.

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

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

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

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

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

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

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

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

1 one in time for the conference.

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

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

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

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

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

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

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

1 103. On December 21, 2012, Dr. Stolper telephoned Dr. Troian to reiterate the
2 “seriousness” of Drs. Gharib’s and Rosakis’s allegations that she had misappropriated
3 Dr. Niavaranikheiri’s work and had used a placeholder name in the 2012 APS
4 abstract. He told Dr. Troian that her actions constituted “research misconduct,” and
5 had “irreparably harmed” the reputation of the Institute.

6 104. Charges of research and academic misconduct are among the most
7 serious and damaging against a faculty member. Such charges, even if later
8 withdrawn, have far reaching, long-lasting repercussions that can damage an
9 academic and consulting career permanently.

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

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

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

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

22 109. Caltech’s Whistleblower Policy, which is part of Dr. Troian’s contract
23 with Caltech, prohibits “retaliation against an individual who makes a good faith
24 disclosure of suspected wrongful conduct” and provides that if “an employee believes
25 s/he has been the subject of retaliation for making a good-faith disclosure, s/he is
26 encouraged to contact her/his supervisor.” Dr. Troian’s January 4, 2013 letter was
27 the second time she had complained to Dr. Stolper, her supervisor, about Drs.

1 Rosakis and Gharib’s retaliation against her for her disclosures about Dr. Gat to the
2 FBI. Instead of investigating Dr. Troian’s retaliation complaints in accordance with
3 Caltech’s Whistleblower Policy, Dr. Stolper further conspired with Drs. Gharib and
4 Rosakis to silence Dr. Troian and to push her out of her job at Caltech.

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

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

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

14 (1) your admitted listing of your cat as first author on the
15 submitted and published abstract; and (2) an allegation by Dr.
16 Anoosheh Niavaranikheiri, your postdoctoral fellow from
17 2011 to 2012, that the work presented in the abstract is, in part,
18 her work for which she should have received credit as a
coauthor.

19 112. Caltech’s charges against Dr. Troian amounted to charges of plagiarism
20 and falsification of the research record, which constitute “research misconduct” under
21 the Misconduct Policy set forth in the Caltech Faculty Handbook. Faculty Handbook
22 at 7/1. Dr. Stolper had in fact already told Dr. Troian that the charges against her
23 constituted “research misconduct.” Dr. Troian was therefore entitled to the
24 protections set forth in the Handbook’s Misconduct Policy.

25 113. Rather than follow the Handbook’s Misconduct Policy, however, Dr.
26 Stolper’s March 1, 2013 letter said that Caltech was using the Misconduct Policy only
27

1 as “guidance,” which, in effect, allowed Caltech to bend the rules and find Dr. Troian
2 guilty regardless of the evidence uncovered in the investigation. Throughout
3 Caltech’s investigation, Dr. Fisher-Adams and members of the Investigation
4 Committee repeatedly denied that Dr. Troian had been charged with research
5 misconduct and reiterated that they were merely using the Misconduct Policy as a
6 “framework” for the investigation.

7 114. Pursuant to the Misconduct Policy, Dr. Stolper assembled an
8 Investigation Committee to investigate the allegations against Dr. Troian. Dr. Stolper
9 hand-picked the committee.

10 115. Between March 1, 2013 and May 8, 2013, Dr. Stolper’s hand-picked
11 Investigation Committee interviewed witnesses and collected evidence related to the
12 charges against Dr. Troian. On April 19, 2013, Dr. Troian submitted 198 pages of
13 supporting documentation in her defense, though Caltech refused to show her Dr.
14 Niavaranikeiri’s purported complaint or to identify which text, slides, plots,
15 equations, data, or results were in dispute.

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

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

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

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

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

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

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

24 123. On October 17, 2013, Melany Hunt, Vice Provost of Academic Affairs,
25 acting at the direction of Provost and then-Interim President Stolper, ratified the
26
27

1 Committee's findings and issued a decision recommending three sanctions against
2 Dr. Troian:

3 1) Dr. Troian was to draft a letter notifying APS that she had violated
4 their policies with her November 2012 and March 2013 presentations; and if
5 she refused to do so, Dr. Hunt would notify APS herself;

6 2) Dr. Troian was to acknowledge Dr. Niavaranikheiri in all future
7 publications related to any of her "work on molecular dynamics simulations at
8 liquid/solid interfaces;" and

9 3) Dr. Troian was to send "copies of preprints of future papers on this
10 topic to the Office of the Provost and EAS Division Office," namely Drs.
11 Gharib and Rosakis.

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

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

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

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

21 127. At the meeting, Dr. Stolper refused to discuss the facts of her case or the
22 underlying charges, as the Handbook requires at the appeal stage. He instead told Dr.
23 Troian, "I don't know what the facts are and I don't care." He stated that he could
24 "make things go away" if she admitted that she had exercised "poor judgment" and
25 mistreated students, postdocs, and colleagues at Caltech. He told Dr. Troian the exact
26 words he wanted to hear her use to confess to the false allegations of misconduct, and
27 stated it "avoids having to find the truth." He emphasized there was no point in

1 discussing what happened when or who said what.

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

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

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

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

1 claimed that Dr. Troian’s December 14, 2012 meeting with Drs. Gharib and Rosakis
2 constituted the “Inquiry.” However, Dr. Troian was not presented with any written
3 charges or evidence of misconduct before or during that meeting, during which Drs.
4 Gharib and Rosakis repeatedly accused Dr. Troian of bringing the FBI to campus.

5 137. The Institute failed to afford Dr. Troian any participation in an inquiry
6 “process.” It further failed to collect any evidence from her, provide her with a
7 written “report of the inquiry,” or give her an opportunity to comment on any such
8 report, even though Dr. Stolper acknowledged on February 26, 2014 that he received
9 the report from Drs. Gharib and Rosakis.

10 **B. Caltech Appointed an Investigation Committee Lacking Technical**
11 **Competence in Dr. Troian’s Field.**

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

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

26 ///
27

1 **C. Caltech Permitted Biased Individuals to Serve on the Investigation**
2 **Committee.**

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

7 141. Caltech ignored Dr. Troian’s concerns of bias of the Committee
8 members. One half of the Committee had clear allegiances to Drs. Gharib and
9 Rosakis, the individuals who initiated the complaint and campaign of retaliation
10 against Dr. Troian.

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

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

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

22 **D. Caltech’s Investigation Exceeded the Scope of the Charges Against**
23 **Dr. Troian.**

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

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

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

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

14 149. When the Investigation Committee issued its Draft Report dated June 25,
15 2013, Dr. Troian learned for the first time that the Committee had investigated
16 conduct related to an abstract she submitted for an APS meeting held in March 2013.

17 Caltech failed to give Dr. Troian notice that it had charged her with misconduct
18 related to the 2013 APS meeting, and she had no opportunity to rebut this false and
19 unsupported charge at her hearing. The Committee’s Draft Report nevertheless
20 concluded that she had “adopted authorship manipulation a second time for rule-
21 evasion purposes during submission of the 2013 APS March meeting abstract . . .
22 including backdating the abstract submission date to the original submission date,
23 compromising the scientific record.”

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

26 150. The Misconduct Policy provides:
27

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

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

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

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

25 153. Dr. Troian submitted a 17-page appeal to Dr. Hunt challenging the
26 Committee’s findings after it issued its Final Report. Neither Dr. Hunt nor Dr.
27 Stolper referred to any of Dr. Troian’s evidence or the appropriate evidentiary
28 standards in affirming the Committee’s findings.

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

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

7 155. Dr. Stolper drew up the charges against Dr. Troian and hand-picked the
8 Investigation Committee. The Policy therefore prohibited him from acting as the
9 individual to whom Dr. Troian appealed, even though he was Interim President at the
10 time. Further, Dr. Stolper could not render a fair decision in Dr. Troian’s appeal
11 since he admitted that he had pre-determined her guilt before she was charged. His
12 bias was evident in his conduct during her appeal on March 18, 2014, including his
13 prohibition against making a record of her appeal, which violated the Misconduct
14 Policy’s admonition that “all stages of the procedure should be fully documented,” Id.
15 at 7/1, his statements that he did not “care about the facts,” and his refusal to review
16 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
20 justice and fairness.” Id. Caltech deprived Dr. Troian of just and fair treatment by
21 denying her the benefit of enumerated rights in the Misconduct Policy and by
22 subjecting her to an inherently unfair process pre-determined to find her guilty.

23 157. From the initiation of the investigation in February 2013 through the date
24 of her hearing on May 8, 2013, those investigating Dr. Troian, including Dr. Stolper,
25 repeatedly told her that the charges against her arose from a complaint Caltech
26 received from Dr. Niavaranikeiri, Dr. Troian’s former postdoc. In July 2013, when
27

1 Dr. Troian received the Investigation Committee's Draft Report, she learned for the
2 first time that the Committee had never interviewed Dr. Niavaranikeiri, and that Dr.
3 Niavaranikeiri had never presented any evidence of plagiarism or misappropriation
4 to the Committee. She also learned for the first time that Drs. Gharib and Rosakis,
5 not Dr. Niavaranikeiri, had pressured Dr. Stolper to initiate the investigation.

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

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

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

24 161. In April 2013, before the Committee issued its Draft Report, Dr. Troian
25 submitted evidence that she had begun her own independent thermal slip simulations
26 in June 2012 and was collecting her own data by July 2012, nearly one month before
27

1 she submitted the 2012 APS abstract. The Committee nevertheless falsely stated in
2 its Draft Report that Dr. Troian did not begin her own simulations until after she had
3 submitted the abstract in August 2012. The Committee cited this false factual
4 allegation to support its erroneous conclusion that Dr. Troian had relied on Dr.
5 Niavaranikeiri's work for the 2012 APS abstract. Dr. Troian highlighted the
6 Committee's factual misrepresentation in her August 19, 2013 rebuttal to the Draft
7 Report, but the Committee failed to correct it. Instead, in the Final Report, the
8 Committee falsely stated that Dr. Troian had no independent results available to her
9 by the time she submitted the 2012 APS abstract and used this knowing
10 misrepresentation to support its conclusion that Dr. Troian had based her abstract on
11 Dr. Niavaranikeiri's work.

12 162. Dr. Troian submitted 198 pages of evidence in advance of the hearing on
13 May 8, 2013. The Committee refused Dr. Troian's efforts to review this evidence
14 during the hearing, even though it provided answers to numerous questions the
15 Committee posed to her. The Committee also omitted 70 pages of exhibits that Dr.
16 Troian submitted to rebut the Draft Report from the record accompanying the Final
17 Report, and upon information and belief, did not review those documents. Dr.
18 Troian's evidence definitively demonstrated that her results were consistent with over
19 30 years of results from the scientific literature. Conversely, Dr. Niavaranikeiri's
20 results were inconsistent with fundamental laws of physics, which explained why Dr.
21 Niavaranikeiri did not warrant acknowledgement in Dr. Troian's APS abstracts or
22 presentations. Dr. Troian's evidence was uncontroverted, but the Committee
23 nevertheless concluded that Dr. Niavaranikeiri warranted acknowledgement, which
24 demonstrated that the Committee willfully disregarded Dr. Troian's evidence.

25 163. Dr. Troian also provided to the Committee 70 examples of changes listed
26 in the 2012 APS DFD Program Corrigenda, including changes to abstract authors
27

1 before and after the conference. Two of these changes resulted in the same
2 researcher presenting twice at the conference, which is precisely what occurred in Dr.
3 Troian's case. This evidence definitively proved that APS approved such changes,
4 but the Committee failed to acknowledge this evidence in finding that Dr. Troian
5 used a placeholder name to circumvent APS rules.

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

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

13 166. Dr. Fisher-Adams's role in the investigation also violated Dr. Troian's
14 right to just and fair treatment. The Misconduct Policy's provision on Inquiries states
15 that "every effort should be made to make personal legal counsel unnecessary for
16 either complainant or respondent at this and all other stages." Faculty Handbook at
17 7/2.

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

22 168. Dr. Troian challenged Dr. Fisher-Adams' role in the investigation from
23 the start because Dr. Fisher-Adams reported directly to Dr. Gharib, and therefore, had
24 a conflict of interest in violation of Caltech policy. Caltech nevertheless insisted on
25 Dr. Fisher-Adams's participation and falsely claimed she was merely providing
26 "administrative support" to the Investigation Committee.
27

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

20 170. Dr. Stolper's stated bias against Dr. Troian before the investigation began
21 renders Caltech's proceedings inherently unfair. In December 2012, before issuing
22 the charging document, Dr. Stolper wrote the following to Dr. Troian:

23 [I]n my opinion, there can be no mitigation based on any
24 circumstances I can currently envision (including those that
25 you have offered related to your postdoctoral scholar) for
26 having listed your cat as the first author on a submission for
27 publication. There can be no interpretation other than this was
a purposeful misrepresentation of the people involved in the

1 work that you presented. As academics and scientists such
2 behavior cannot be sanctioned; there is no middle ground
3 when it comes to honest and accurate representation of our
work and who is credited with having participated in it.

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

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

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

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

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

22 175. Caltech deliberately excluded Dr. Troian from all meetings with the
23 Engineering and Applied Sciences (EAS) Visiting Committee during their March
24 2014 visit to Caltech, even though Caltech invited her to meet with that Committee
25 during their last visit in 2007. The Committee consists of prominent Caltech trustees,
26 business leaders, and faculty from leading universities who visit Caltech every five
27

1 years and advise the President, Provost, and EAS Division Chair. Dr. Rosakis invited
2 many of Troian's faculty colleagues to meet with Committee members during their
3 2014 visit, which allowed them to shape the division's agenda, but Dr. Rosakis
4 deliberately excluded Dr. Troian.

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

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

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

26 179. On information and belief, Caltech denied Dr. Troian a courtesy
27 appointment in the Physics Department in 2011, though she clearly qualified for the

1 appointment, and it is a routine matter for Caltech faculty to receive courtesy
2 appointments.

3 180. As a result of the inordinate amount of time and energy Dr. Troian has
4 spent defending herself against Caltech's baseless charges and retaliation, she has not
5 been able to finalize research she would have otherwise finalized; has had to decline
6 numerous outside consulting opportunities which she would have otherwise assumed;
7 and has had to decline numerous invitations to attend workshops, lectures, and
8 roundtables, which she would have otherwise accepted, including an invitation to
9 spend three-and-a-half months at the Isaac Newton Institute for Mathematical
10 Sciences in Cambridge, England, an invitation by the Editors in Chief of the Annual
11 Review of Condensed Matter Physics to write a review article, and an invitation by
12 the Chairman and Editor-in-Chief of World Scientific Publishing Company to write a
13 volume of lecture notes.

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

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

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

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

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

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

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

11 187. The newly-released file also includes a document, dated 2007, that
12 contains wholly false allegations of Dr. Troian's "abuse" of Caltech staff. Neither of
13 these false documents were in Dr. Troian's personnel file as of April 2013.

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

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

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

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

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

1 physical ailments.
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5 **COUNT I – RETALIATION IN VIOLATION OF CAL. LABOR CODE**
6 **§ 1102.5(b)**

7 192. Plaintiff incorporates and alleges paragraphs 1 through 191 above as if
8 restated herein.

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

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

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

23 196. Caltech had knowledge of Dr. Troian's internal disclosures regarding Dr.
24 Gat because she made them to Caltech officials. Caltech clearly also had knowledge
25 of Dr. Troian's disclosures to the FBI about Dr. Gat. Drs. Gharib, Rosakis, and
26 Stolper repeatedly questioned, threatened, and rebuked Dr. Troian about her
27 communications with the FBI regarding Dr. Gat, beginning two weeks after her
28

1 second conversation with the FBI.

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

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

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

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

26 201. As a further direct and proximate result of Caltech's conduct, Dr. Troian
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1 has suffered mental and emotional pain, distress and discomfort, all to her detriment
2 and damage in amounts not fully ascertained but within the jurisdiction of this court
3 and subject to proof at the time of trial.

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

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

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

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

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

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

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

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

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

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

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

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

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

23 (4) Caltech's investigation exceeded the scope of the charges against Dr.
24 Troian insofar as Caltech used the investigation to identify additional charges of
25 alleged misconduct related to her 2013 APS abstract and failed to give Dr. Troian
26 notice of the additional allegations in violation of the Misconduct Policy.
27

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

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

6 (7) Caltech prevented Dr. Troian from being “treated with justice and
7 fairness” in violation of the Misconduct Policy by violating the enumerated provisions
8 of the policy, and (i) permitting Drs. Gharib, Rosakis, and Stolper to use the policy to
9 harass and retaliate against Dr. Troian; (ii) knowingly misrepresenting and willfully
10 ignoring exculpatory evidence she presented; (iii) crediting the testimony of witnesses
11 it knew were biased against her; (iv) permitting Dr. Fisher-Adams to act as Caltech’s
12 advocate during the investigation while denying Dr. Troian counsel; and (v)
13 permitting Dr. Stolper to be involved at multiple stages of the process even though he
14 stated his bias against her from the beginning.

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

17 (1) In Finding I-1 of the Final Report, the Committee found that Dr. Troian
18 listed “Pucci” as first author on her 2012 APS abstract “to ensure that the presentation
19 could be given, regardless of the availability of a substantive replacement for [Dr.
20 Niavarani kheiri].” Finding I-1 is not supported by the weight of the evidence because
21 Dr. Troian testified that she included “Pucci” as first author on the APS 2012 Abstract
22 as a placeholder while she sought another collaborator and presented evidence that in
23 the months between submitting the abstract and giving the presentation she actively
24 sought an assistant. There is no credible evidence in the record that contradicts Dr.
25 Troian’s testimony.

1 (2) In Assessment I-1 of the Final Report, the Committee found that listing
2 “Pucci” as an author on the 2012 APS abstract “constituted a circumvention of APS
3 rules.” Assessment I-1 is not supported by the weight of the evidence because Dr.
4 Troian testified and presented evidence that (i) conference attendees are able to and
5 often do revise APS abstracts, including author lists, through the date of a conference
6 and after; (ii) individuals listed as first authors on abstracts are often not the
7 individuals who present the material at the conference; (iii) on the first day of the 2012
8 conference, she informed APS that she had been unable to find a collaborator and
9 APS still permitted her to give her presentation; and (iv) APS ultimately removed the
10 name “Pucci” from the abstract after a phone call from Dr. Troian. There is no
11 credible evidence in the record to contradict Dr. Troian’s testimony and the supporting
12 evidence she presented.

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

20 (4) In Assessment II-1 of the Final Report, the Committee found that Dr.
21 Niavaranikehrer merited acknowledgement in Dr. Troian’s 2012 and 2013 APS
22 presentations. Assessment II-1 is not supported by the weight of the evidence because
23 Dr. Troian presented uncontroverted evidence that (i) Dr. Troian engaged in
24 independent research using computing algorithms, methods of analysis, and hardware
25 different from those that Dr. Niavaranikehrer used to arrive at the conclusions she (Dr.
26 Troian) presented at the 2012 and 2013 APS conferences; (ii) the findings that Dr.
27

1 Niavaranikheiri reported during her employment at Caltech contradicted the findings
2 Dr. Troian presented at the 2012 and 2013 APS conferences and thirty years of
3 research in the field; (iii) general similarities between plots appearing in Dr.
4 Niavaranikheiri's notebooks and lab materials and Dr. Troian's abstracts and
5 presentations were entirely attributable to the fact that Dr. Troian instructed Dr.
6 Niavaranikheiri to reproduce plots that had been documented in the scientific literature
7 for over 30 years in order to confirm Dr. Niavaranikheiri's computer simulations were
8 obeying the laws of physics. This evidence proved that Dr. Niavaranikheiri made no
9 contributions, unique or otherwise, to the findings Dr. Troian presented at the 2012
10 and 2013 APS conferences that would entitle her to acknowledgment or attribution.
11 There is no credible evidence in the record to contradict Dr. Troian's evidence.

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

23 (6) In Finding II-3 and Assessment II-3 of the Final Report, the Committee
24 found that there were no results other than those obtained by Dr. Niavaranikheiri
25 available to Dr. Troian by the time she submitted the 2012 APS abstract, so the claims
26 in the 2012 abstract were not based on Dr. Troian's independent work. Finding II-3
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1 and Assessment II-3 are not supported by the weight of the evidence because Dr.
2 Troian submitted definitive proof, which the Committee willfully ignored and failed to
3 rebut, that she had achieved her own independent results by the time she submitted the
4 2012 APS abstract.

5 (7) In Finding IV and Assessment IV of the Final Report, the Committee
6 found that Dr. Troian was not dissatisfied with Dr. Niavaranikeiri's work until April
7 2012, and that Dr. Niavaranikeiri's abrupt departure from Caltech in June "may
8 explain, though not justify," Dr. Troian's decision not to acknowledge Dr.
9 Niavaranikeiri's contributions. Finding IV and Assessment IV are not supported by
10 the weight of the evidence. Dr. Troian produced email correspondence and other
11 material from September 2011 onwards that demonstrated her displeasure with Dr.
12 Niavaranikeiri's work and expressed her concern over the fact that Dr.
13 Niavaranikeiri was producing erroneous results. Moreover, Dr. Troian presented
14 uncontroverted evidence that demonstrated definitively that Dr. Niavaranikeiri's
15 findings contradicted Dr. Troian's findings and thirty years of research in the field.
16 This evidence proved that Dr. Niavaranikeiri made no contributions to the findings
17 Dr. Troian presented at the 2012 and 2013 APS conferences that would entitle her to
18 acknowledgement or attribution. There is no credible evidence in the record that Dr.
19 Niavaranikeiri warranted acknowledgement in Dr. Troian's APS materials.

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

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

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

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

5 223. Caltech breached the terms of Dr. Troian's employment with the Institute
6 by disciplining her for conduct related to her research without following the
7 procedures in the Faculty Handbook's Misconduct Policy and by failing to comply
8 with its Whistleblower Policy.

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

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

25 226. The Faculty Handbook incorporates the Institute's Whistleblower Policy
26 by reference.

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

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

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

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

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

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19 **COUNT VI - BREACH OF IMPLIED COVENANT OF GOOD FAITH**
20 **AND FAIR DEALING**

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

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

1 injuries suffered as a result of the retaliation she has suffered, including loss of future
2 earnings, pain and suffering, emotional distress, public humiliation, and damage to
3 her professional reputation, in an amount appropriate to the proof presented at trial, in
4 excess of \$25,000;

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

8 8. Award Dr. Troian statutory and civil penalties according to proof,
9 including but not limited to all penalties authorized by the California Labor Code §
10 2699.

11 9. Award Dr. Troian the attorneys' fees and costs she has incurred in
12 bringing this action pursuant to California Civil Code § 1021.5, California Labor
13 Code § 2699, and any other applicable provisions of law;

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

15 Respectfully submitted,

16
17 Dated: _____

18
19 By: _____

20 Dan Stormer
21 Attorney for Plaintiff / Petitioner
22 Sandra Troian, Ph.D.
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DEMAND FOR JURY TRIAL

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

Respectfully submitted,

Dated: _____

By: _____

Dan Stormer
Attorney for Plaintiff / Petitioner
Sandra Troian, Ph.D.