


Approved: 
JOSHUA A. NAFTALIS
Assistant United States Attorney

Before: HON. SARAH NETBURN
United States Magistrate Judge
Southern District of New York

- - - - - x 20 MAG 13097

UNITED STATES OF AMERICA : SEALED COMPLAINT

- v. - : Violations of 15 U.S.C.
§§ 78j(b) and 78ff; 17 C.F.R.
JAMES JEREMY BARBERA, : § 240.10b-5; and 18 U.S.C.
§§ 371, 1343, and 2.

Defendant. :
COUNTY OF OFFENSES: NEW YORK

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SOUTHERN DISTRICT OF NEW YORK, ss.:

JONATHAN H. POLONITZA, being duly sworn, deposes and says that he is a Special Agent with the Federal Bureau of Investigation ("FBI") and charges as follows:

COUNT ONE

(Conspiracy to Commit Securities Fraud and Wire Fraud)

1. From at least in or about 2013 through in or about 2020, in the Southern District of New York and elsewhere, JAMES JEREMY BARBERA, the defendant, and others known and unknown, willfully and knowingly did combine, conspire, confederate, and agree together and with each other to commit offenses against the United States, to wit, securities fraud, in violation of Title 15, United States Code, Sections 78j(b) and 78ff, and Title 17, Code of Federal Regulations, Section 240.10b-5, and wire fraud, in violation of Title 18, United States Code, Section 1343.

2. It was a part and an object of the conspiracy that JAMES JEREMY BARBERA, the defendant, and others known and unknown, willfully and knowingly, directly and indirectly, by use of the means and instrumentalities of interstate commerce, and of the mails, and the facilities of national securities exchanges, would and did use and employ manipulative and deceptive devices and contrivances, in connection with the purchase and sale of securities, in violation of Title 17, Code of Federal Regulations,

Section 240.10b-5, by (a) employing devices, schemes, and artifices to defraud; (b) making and causing to be made untrue statements of material facts and omitting to state material facts necessary in order to make the statements made, in light of the circumstances under which they were made, not misleading; and (c) engaging in acts, practices, and courses of business which operated and would operate as a fraud and deceit upon other persons, in violation of Title 15, United States Code, Sections 78j(b) and 78ff, and Title 17, Code of Federal Regulations, Section 240.10b-5.

3. It was a further part and an object of the conspiracy that JAMES JEREMY BARBERA, the defendant, and others known and unknown, willfully and knowingly, having devised and intending to devise a scheme and artifice to defraud, and for obtaining money and property by means of false and fraudulent pretenses, representations, and promises, for the purpose of executing such scheme and artifice, would and did transmit and cause to be transmitted by means of wire communication in interstate and foreign commerce, writings, signs, signals, pictures, and sounds for the purpose of executing such scheme and artifice, in violation of Title 18, United States Code, Section 1343.

Overt Acts

4. In furtherance of the conspiracy and to effect its illegal objects, JAMES JEREMY BARBERA, the defendant, committed the following overt acts, among others, in the Southern District of New York and elsewhere:

a. On or about June 8, 2016, BARBERA used approximately \$7,440 in money raised from investors in Company 2, a privately held biotechnology company, to pay the tuition for his child's private school in New York, New York.

b. On or about August 31, 2018, BARBERA used approximately \$11,230 in money raised from investors in Company 2 to pay the mortgage on his apartment on Central Park West in New York, New York.

(Title 18, United States Code, Section 371.)

COUNT TWO

(Securities Fraud)

5. From at least in or about 2013 through in or about 2020, in the Southern District of New York and elsewhere, JAMES JEREMY BARBERA, the defendant, willfully and knowingly, directly and indirectly, by use of the means and instrumentalities of interstate commerce, and of the mails, and the facilities of national securities exchanges, used and employed manipulative and deceptive devices and contrivances, in connection with the purchase and sale of securities, in violation of Title 17, Code of Federal Regulations, Section 240.10b-5, by (a) employing devices, schemes, and artifices to defraud; (b) making and causing to be made untrue statements of material facts and omitting to state material facts necessary in order to make the statements made, in light of the circumstances under which they were made, not misleading; and (c) engaging in acts, practices, and courses of business which operated and would operate as a fraud and deceit upon other persons, to wit, BARBERA made material misrepresentations and omissions to investors, and misappropriated investor funds for his own use.

(Title 15, United States Code, Sections 78j(b) and 78ff;
Title 17, Code of Federal Regulations, Section 240.10b-5;
and Title 18, United States Code, Section 2.)

COUNT THREE

(Wire Fraud)

6. From at least in or about 2013 through in or about 2020, in the Southern District of New York and elsewhere, JAMES JEREMY BARBERA, the defendant, willfully and knowingly, having devised and intending to devise a scheme and artifice to defraud, and for obtaining money and property by means of false and fraudulent pretenses, representations, and promises, transmitted and caused to be transmitted by means of wire, radio, and television communication in interstate and foreign commerce, writings, signs, signals, pictures, and sounds for the purpose of executing such scheme and artifice, to wit, BARBERA, through the use of interstate wire communications, made material misrepresentations and omissions to investors, and misappropriated investor funds for his own use.

(Title 18, United States Code, Sections 1343 and 2.)

The bases for my knowledge and the foregoing charges are, in part, as follows:

7. I have been a Special Agent with the FBI for approximately ten years. I am currently assigned to a squad responsible for investigating violations of the federal securities laws and related offenses. I have participated in numerous investigations of these offenses, and I have made and participated in making arrests of individuals for participating in such offenses.

8. The information contained in this affidavit is based upon my personal knowledge, as well as information obtained during this investigation, directly or indirectly, from other sources, including documents and information provided to me by others. The documents and information include, but are not limited to, documents provided by Company 2, the National Aeronautics and Space Administration ("NASA"), and Company 2 investors; bank records for accounts associated with JAMES JEREMY BARBERA, the defendant, and Company 2; videos and consensual recordings; and public records from the Securities and Exchange Commission (the "SEC"), and the States of California and Delaware (collectively, the "Records"). Because this affidavit is prepared for the limited purpose of establishing probable cause, I have not set forth each and every fact I have learned in connection with this investigation. Where conversations and events are referred to herein, they are related in substance and in part. Where dates, figures, and calculations are set forth herein, they are approximate.

Relevant Entities and Individuals

9. Based upon my review of the Records and my interviews of witnesses, I have learned the following, in substance and in part:

a. At all times relevant to this Complaint, JAMES JEREMY BARBERA, the defendant, resided in New York, New York. At certain times relevant to this Complaint, BARBERA was the Chief Executive Officer ("CEO") of three companies, Company 1, Company 2, and Company 3, which, as discussed below, had various intertwined and overlapping relationships.

b. From in or about 1997 through in or about July 2014, BARBERA was the Chairman and CEO of Company 1, a publicly traded company based in New York, New York, that purported to be,

among other things, a nanotechnology company.¹ At certain times relevant to this Complaint, Company 1's common stock traded on the OTC Bulletin Board, an over-the-counter securities market located in New York, New York.

c. On or about August 19, 2009, Company 1 publicly announced that it had formed Company 2 as a purported subsidiary that, using NASA technology, focused on carbon based chemical sensing for gas and organic vapor detection in human breath. On or about November 9, 2009, BARBERA incorporated Company 2 in California. Contrary to Company 1's public statements, Company 2's incorporation documents reflect that BARBERA owned Company 2.

d. On or about June 7, 2011, the SEC announced that it had suspended trading in Company 1's stock, as well as the stock of 16 other companies, as part of a "broad effort to combat microcap stock fraud." The SEC explained it had halted trading in these issuers "because of questions regarding the adequacy and accuracy of information about the companies, including their assets, business operations, current financial condition and/or issuances of shares in company stock."

e. In or about November 2013, BARBERA became the CEO of Company 3, a publicly traded, biotechnology company located in New York, New York, which was founded in or about 2010. Company 3's common stock traded on the OTCQB, an over-the-counter securities market located in New York, New York. In or about November 2013, Company 3 publicly announced in its filings with the SEC that Company 2 had acquired a controlling interest in Company 3, and that the two companies were working together to develop a breathalyzer sensor technology, based on NASA technology. In or about January 2015, Company 3 moved its offices to the same address in New York, New York as Company 2. In or about August 2015, Company 3 changed its name to one similar to Company 2's name.

f. On or about July 29, 2014, the SEC announced the settlement of federal securities fraud charges against BARBERA

1. Based on my review of public documents, I have learned that nanotechnology is a field of applied science and technology whose unifying theme is the control of matter on the molecular level in scales smaller than 1 micrometre, normally 1 to 100 nanometers, and the fabrication of devices within that size range.

and Company 1 for making materially false and misleading statements about the true business operations and finances of Company 1 (the "SEC Fraud Settlement"). The SEC alleged that, while BARBERA had "portray[ed] [Company 1] as a rapidly growing and hugely promising technology venture, [Company 1] remains essentially dormant with little or no capital." As part of the SEC Fraud Settlement, BARBERA consented to entry of a final judgment permanently enjoining him from future violations of the antifraud provisions of the federal securities laws, agreed to pay a \$100,000 penalty, and agreed to be permanently barred from acting as an officer or director of a public company or from participating in a penny stock offering. In or about July 2014, as a result of the SEC Fraud Settlement and related ban, BARBERA stopped serving as the CEO of both Company 1 and Company 3.

g. A few weeks later, on or about August 12, 2014, Company 2 merged into a Delaware corporation. Company 2 represented to investors it had developed a breathalyzer sensor technology that could detect cancer and narcotics in human breath, based on technology developed by NASA, and that it was also partnered with a major U.S. research university ("University 1"). From in or about 2009 through in or about October 2019 BARBERA was Company 2's CEO. In or about October 2019, under pressure from Company 2's board of directors, BARBERA resigned as CEO and became Company 2's Chief Science Officer. Company 2's board suspended BARBERA in or about December 2019, and terminated BARBERA in or about April 2020.

h. In or about October 2019, BARBERA and a co-conspirator not named herein ("CC-1") co-founded Company 4, a Florida corporation, which had purportedly developed a breathalyzer sensor technology that, based on Company 2's and NASA's technology, could detect diseases from organic compounds in an animal's breath. Thereafter, BARBERA and CC-1 incorporated other companies together.

i. NASA is an independent U.S. government agency responsible for the civilian space program, as well as aeronautics and aerospace research. One of NASA's facilities is the Ames Research Center at Moffett Field in Silicon Valley, California ("NASA Ames").

Overview of the Scheme to Defraud

10. Based on my review of the Records and my interviews of witnesses, I have learned the following, in substance and in part:

a. From at least in or about 2013 through in or about 2020, JAMES JEREMY BARBERA, the defendant, CC-1, and others perpetrated a scheme to defraud dozens of investors out of at least approximately \$12.2 million (i) by soliciting investments in Company 2 equity and notes through false and misleading statements, (ii) by failing to use investors' funds as promised, and (iii) by converting investors' money to their own use.

b. BARBERA, CC-1, and others made false and misleading representations to actual and potential Company 2 investors in in-person meetings, phone calls, emails, PowerPoint presentations, and videos, including as set forth below:

i. BARBERA falsely represented that Company 2 had developed a breathalyzer sensor, based on technology developed by NASA, that could detect narcotics and cancer from a person's breath. In truth and in fact, and as BARBERA well knew, Company 2 and NASA never developed such a technology. Indeed, NASA conducted no research for Company 2 related to this technology after in or about late 2017, and NASA did not permit research related to narcotics testing at NASA facilities.

ii. BARBERA falsely represented that Company 2 had an exclusive license with NASA for certain patents related to a breathalyzer sensor technology for the life of the patents, and used NASA's name and logo to solicit investors in Company 2. In truth and in fact, and as BARBERA well knew, Company 2 did not have an exclusive license with NASA.

iii. BARBERA falsely represented to potential and actual investors that institutional investors, including a large, publicly traded chemical company ("Institutional Investor 1"), had made substantial investments in Company 2. In truth and in fact, and as BARBERA well knew, Institutional Investor 1 never invested in Company 2.

iv. BARBERA falsely represented that Company 2 would soon have an initial public offering ("IPO"), which would result in large profits to Company 2 investors. In truth and in fact, and as BARBERA well knew, Company 2 was not close to an IPO.

v. BARBERA converted to his own use approximately fifty percent of the approximately \$12.2 million in Company 2 investor funds in the form of cash withdrawals and to pay personal expenses, including private school and college tuition for his children, mortgage payments on his Central Park West apartment, and for his other personal items, such as credit card bills, jewelry, automobiles, and daily living expenses.

The Scheme to Defraud

Company 1 and BARBERA Enter into Agreements with NASA Related to NASA's Research

11. Based on my review of public records and NASA documents, and my interviews of NASA employees, I have learned the following, in substance and in part:

a. In or about 2009, NASA scientists began to conduct research to develop a sensor technology that could detect biomarkers² for diabetes in human breath (the "NASA Research"). In or about December 2012, NASA scientists were awarded U.S. patents related to the NASA Research (the "NASA Patents"). The NASA Patents were named NASA's invention of the year for 2012.

b. On or about July 1, 2009, Company 1 entered into a Reimbursable Space Act Agreement ("RSAA")³ with NASA, under

2. Based on my review of public documents, I have learned that a biomarker is a measurable substance in an organism whose presence is indicative of some phenomenon such as disease, infection, or environmental exposure, such as cancer or narcotics.

3. Section 20113(e) of the National Aeronautics and Space Act (the "Space Act"), 51 U.S.C. §§ 20101 et seq., authorizes NASA to, among other things, "enter into and perform such contracts, leases, cooperative agreements, or other transactions as may be necessary in the conduct of its work and on such terms as it may deem appropriate, with any agency or instrumentality of the United States, or with any State, Territory, or possession, or with any political subdivision thereof, or with any person, firm, association, corporation, or educational institution." Arrangements concluded under the "other transactions" authority of the Space Act are commonly referred to as Reimbursable Space Act Agreements. NASA uses this authority to enter into a wide range

which Company 1 agreed to pay NASA to perform certain research related to the NASA Research. JAMES JEREMY BARBERA, the defendant, signed the agreement on behalf of Company 1.

c. As noted above, on or about August 19, 2009, Company 1 issued a press release announcing that it had formed a subsidiary, Company 2, to focus on the NASA-related technology.

d. As noted above, on or about June 7, 2011, the SEC announced that it had suspended trading in Company 1's stock as part of a "broad effort to combat microcap stock fraud."

e. As a result of the SEC's investigation of Company 1, NASA began to examine its relationship with Company 1. For example, on or about October 4, 2011, a senior NASA employee sent an email to a senior NASA nanotechnology scientist ("Scientist 1"), asking Scientist 1 to provide information about NASA's relationship with Company 1 because there were "unresolved" questions, including (i) whether "[Company 1] is a legitimate partner in good standing" in light of the SEC's investigating Company 1 and delisting its stock, and (ii) Company 1's non-payment history under the RSAAs. That same day, on or about October 4, 2011, Scientist 1 forwarded the email to BARBERA, in which he wrote: "What answers do I give them?" Later that same day, BARBERA replied and falsely claimed, among other things, that the problems at Company 1 were caused by another individual associated with Company 1 (who had been indicted), and that the SEC had investigated Company 1 and "found that we are innocent of any wrong doing. . . . We did nothing." As noted, herein, BARBERA and Company 1 ultimately entered into the SEC Fraud Settlement on or about July 29, 2014.

f. Thereafter, NASA continued its relationship with Company 1 and BARBERA, including by entering into additional RSAAs that effectively extended the 2009 RSAA through in or about mid-2014. BARBERA signed these agreements on behalf of Company 1.

g. Company 1 failed to pay the full amounts due to NASA under the various RSAAs referenced above.

of agreements with numerous entities to advance the NASA mission through its activities and programs.

After BARBERA's and Company 1's SEC Fraud Settlement, BARBERA Switches to Using Company 2 to Enter into Agreements with NASA

12. Based on my review of publicly available documents and NASA documents, and my interviews of NASA employees, I have learned the following, in substance and in part:

a. A few months before JAMES JEREMEY BARBERA, the defendant, and Company 1 entered into the SEC Fraud Settlement, BARBERA started to enter into agreements with NASA using Company 2, rather than continuing to use Company 1. BARBERA did not disclose to NASA the intertwined relationship of Company 1 and Company 2.

b. For example, beginning on or about December 31, 2013, NASA and Company 2 entered into (i) agreements that granted Company 2 a partially exclusive license to the NASA Patents, specifically, for the development of "chemical sensing applications for cancer detection and narcotics detection" for eight years (until approximately December 31, 2021), and (ii) related RSAAs under which Company 2 agreed to pay NASA to try to develop this technology (collectively, the "Agreements"). BARBERA signed the Agreements on behalf of Company 2.

c. Under the Agreements, Company 2 agreed to specific limitations regarding the use of use NASA's name, including that it could be used "only in truthful statements concerning its relationship with [NASA]," and only if, among other things, NASA's name was "not used to indicate that NASA endorses [Company 2's] products, processes, etc."

d. The Agreements also contained development "milestones," setting forth certain research schedules. For example, a license agreement dated on or about December 21, 2015 contained a milestone schedule that included, "clinical trials" to "test the narcotics detection prototype in a hospital setting using patients," and "clinical trials" to "test cancer detection prototype in a hospital setting using patients," both by 2017.

NASA and Company 2 Never Develop the Technology to Detect Narcotics and Cancer in Human Breath

13. Based on my review of NASA documents and interviews of NASA employees, I have learned the following, in substance and in part:

a. Company 2 and NASA never developed a breathalyzer sensor technology capable of detecting either narcotics or cancer in human breath. Indeed, as noted above, NASA had only conducted research related to the detection of biomarkers for diabetes.

b. Company 2 failed to pay the full amounts due to NASA under the Agreements. As such, NASA did not do research for Company 2 after in or about late 2017.

c. NASA did not permit research related to narcotics testing at its facilities, and thus no such testing was ever done.

d. NASA did no research related to the detection of cancer.

e. The claimed "milestones" in the various Agreements for the testing and clinical trials of cancer and narcotics detection prototypes were thus not possible.

14. Based on my review of NASA documents and interviews of NASA employees, I have learned, in substance and in part, that because NASA did not permit research related to narcotics at its facilities, the Agreements were amended with the knowledge and involvement of JAMES JEREMY BARBERA, the defendant, to remove the development of a narcotics detection technology. For example:

a. On or about February 23, 2017, BARBERA sent an email to a NASA employee about a modification to the Agreements, in which he wrote: "NASA has been holding up for many months permission to bring THC into the lab. THC is the most important component of the RSSA [sic] and without THC there won't be any reason for the RSAA."

b. Between on or about October 4 and 12, 2018, BARBERA and Scientist 1 exchanged emails and drafts of one of the Agreements. Scientist 1 made it clear to BARBERA that NASA would not allow NASA to conduct research on narcotics detection. For example, on or about October 4, 2018, Scientist 1 wrote: "First and foremost, I see narcotics inserted in this version for the first time all over again. That is a no go. Jeremy knows that. HQ put a stop to that. This is dead on arrival. I took all of that out." On or about October 9, 2018, BARBERA replied, "Removing the drugs is agreed."

c. On or about November 15, 2018, NASA and Company 2 entered into one of the Agreements, which BARBERA signed on behalf of Company 2. This agreement did not include the development of a technology to test for narcotics. Instead, Company 2 agreed to pay NASA to, among other things, "help develop the [NASA] gas sensor into a reliable tool to analyze breath in order to detect biomarkers for diseases, including lung cancer and colon cancer." As noted above, NASA never performed any such research.

BARBERA Makes Misrepresentations and
Omissions to Company 2 Investors

15. Based on my review of the Records and interviews of witnesses, I have learned that JAMES JEREMY BARBERA, the defendant, and others solicited investments in Company 2 by making false and misleading representations and omissions to investors, including as set forth below.

*BARBERA Makes False Representations
to Investors During Visits to NASA*

16. Based on my interview of witnesses and NASA documents, I have learned the following, in substance and in part:

a. Between at least in or about 2016 and at least in or about 2018, JAMES JEREMY BARBERA, the defendant, solicited investments in Company 2 from investors at NASA Ames, including Institutional Investors 1 and 2.

b. During certain of those visits, BARBERA made misstatements to Company 2 investors about the capabilities of NASA's and Company 2's research and technology, including by falsely representing that the breathalyzer sensor technology could detect different organic compounds simply by changing a microchip in the breathalyzer device.

17. Based on my review of documents provided by NASA and a publicly traded semiconductor company ("Institutional Investor 2"), and communications with representatives of Institutional Investor 2, I have learned the following, in substance and in part:

a. On or about June 5, 2017, JAMES JEREMY BARBERA, the defendant, emailed Scientist 1 to have him arrange a visit for Institutional Investor 2 to NASA Ames, and wrote that Institutional Investor 2 is "a 30 billion . . . semiconductor

company," which had "two objectives, becoming the primary manufacturer of the sensor and acquiring about 20% of [Company 2]."

b. Representatives of Institutional Investor 2 conducted preliminary due diligence on Company 2, including by visiting NASA Ames in or about June 2017.

c. BARBERA told representatives of Institutional Investor 2 that Company 2 had a strategic partnership with Institutional Investor 1, which was investing approximately \$5 million in Company 2, and that a New York-based hedge fund was also investing approximately \$5 million in Company 2.

d. In or about August 2017, Institutional Investor 2 ceased discussions with BARBERA and Company 2, and representatives of Institutional Investor 2 drafted an internal memorandum, which stated, in substance and in part:

i. "[Company 2's] Carbon NanoTube's (CNT) for detection of [volatile organic compounds] is an extremely high risk technology with a very difficult path to commercialization."

ii. "Almost no progress has been made in 3 years since [Company 2] have [sic] licensed the technology from [NASA]" -- which, as noted above, was in or about 2013. Moreover, as also noted, NASA did no research after in or about late 2017 because Company 2 failed to pay NASA under the Agreements.

iii. "There is no evidence or testing that has been completed to indicate that these drugs [heroin and marijuana] can be detected."

Investor 1

18. Based on my interviews of Investor 1, and my review of documents, including publicly available documents and documents provided by Investor 1, I have learned the following, in substance and in part:

a. In or about 2016, JAMES JEREMY BARBERA, the defendant, solicited Investor 1 to invest in Company 2 and offered Investor 1 a "friends and family discount," which allowed Investor 1 to purchase shares in Company 2 at a discount and for his/her investment to be profitable immediately.

b. On or about August 4, 2016, BARBERA sent Investor 1 financial projections for Company 2, which falsely represented that in 2017 Company 2 would have "sales of sensors to distributors" of approximately \$19,777,074 and total sales of approximately \$31,643,319, and that in 2021 Company 2 would have total sales of approximately \$223,860,609.

c. On or about August 6, 2016, BARBERA sent Investor 1 a spreadsheet calculating Investor 1's potential return on investment, and falsely represented, "Just based on the 'discounted' valuation, \$150,000 invested today is presently worth \$460,000." The spreadsheet reflected that Investor 1's investment was for one percent ownership of Company 2.

d. In or about March 2017, Investor 1 invested approximately \$30,000 in Company 2 to purchase approximately 300,000 shares of Company 2's common stock at a price of approximately \$0.10 per share. At around that time, BARBERA falsely represented to Investor 1 that Company 2 was valued at approximately \$20 million.

e. In or about May 2019, BARBERA falsely represented to Investor 1 during an in person conversation in New York, New York that (i) Company 2 was now valued at approximately \$100 million, which meant that Investor 1's investment of approximately \$30,000 was now worth approximately \$150,000; and (ii) Company 2 would be selling its breathalyzer device to law enforcement to detect opioids within the next year.

f. Thereafter, in or about 2019, BARBERA falsely represented to Investor 1 during an in person conversation in New York, New York that Company 2's IPO would take place at the end of 2019 or the beginning of 2020 and that the IPO would occur at a valuation of approximately \$1 billion.

g. In or about November 2019, BARBERA told Investor 1 that Company 2 was licensing its sensor technology to Company 4, a new company that was developing a breathalyzer device for animals in conjunction with another major U.S. research university ("University 2"). BARBERA said that CC-1 was one of his partners in Company 4, and that they had worked together before. As noted above, BARBERA resigned as Company 2's CEO in or about October 2019, under pressure from Company 2's board of directors, and BARBERA and CC-1 incorporated Company 4 in or about late October 2019.

h. On or about February 24, 2020, BARBERA sent Investor 1 an email in which he falsely represented that he was still Company 2's CEO, and attached an investor deck for Company 4, which falsely represented that Company 2 had "turned NASA state-of-the-art technology into an early stage cancer and drug detection device," which Company 4 had licensed.

19. Based on my interviews of a NASA employee, I have learned, in substance and in part, that NASA was never asked to, and never approved, a license to Company 4.

20. As discussed herein, in truth and in fact, and as JAMES JEREMY BARBERA, the defendant, well knew, Company 2 never developed a cancer and drug detection device; as such, Company 2 could not have sales of almost \$20 million in 2017 and could not sell any such device to law enforcement; Company 2 did not have an upcoming IPO, let alone one valued at or near \$1 billion; BARBERA was removed as Company 2's CEO in or about October 2019; and NASA never approved a license to Company 4.

Investor 2

21. Based on my interviews of Investor 2, and my review of documents, including publicly available documents and documents provided by Investor 2, I have learned the following, in substance and in part:

a. During in person meetings and phone calls in New York, New York, in or about 2016, JAMES JEREMY BARBERA, the defendant, falsely represented to Investor 2 that Company 2 had developed a breathalyzer sensor technology to detect cancer, and that Company 2's technology could also be used to detect drugs, such as marijuana, heroin, and fentanyl.

b. On or about December 7, 2016, BARBERA emailed Investor 2 a Company 2 investor deck that falsely represented that Company 2 had taken NASA's "state of the art technology and turned it into an early cancer detection device," and falsely represented that Institutional Investor 1 was "acquiring a material stake in [Company 2]."

c. In or about December 2016, Investor 2 purchased approximately 242,424 shares and approximately 757,576 warrants in Company 2 for approximately \$80,000.

d. On or about August 18, 2017, BABERA emailed Investor 2 a Company 2 shareholder letter, which BARBERA signed, that falsely represented, among other things:

i. Company 2 was in discussions with police departments about "a pilot program" using Company 2's breathalyzer device to detect marijuana.

ii. Company 2 was also "working to adapt our sensor to detect heroin within the next several months."

iii. Company 2 "would launch a pilot program . . . with a major city police department . . . before the end of 2017 to detect heroin using exhaled breath."

iv. Company 2 had "spent years advancing and maturing the [NASA] technology into the prototypes we use today."

v. "[T]hrough the summer and in the fall [of 2017]," Company 2 was "conservatively expect[ing] to close [] major financings" from Institutional Investor 1 and Institutional Investor 2.

e. In or about September 2017, Investor 2 invested an additional approximately \$70,000 in Company 2.

f. In or about early 2018, BARBERA showed Investor 2 a purported prototype of Company 2's breathalyzer device.

g. In or about 2019, BARBERA falsely represented to Investor 2 that Company 2 was finalizing the development of a breathalyzer device to detect cancer. Given this representation, Investor 2 asked BARBERA why Company 2 was still having trouble raising capital; BARBERA attributed the issues to the revelation of the Theranos fraud.

22. As discussed herein, in truth and in fact, and as JAMES JEREMY BARBERA, the defendant, well knew, Company 2 never developed a cancer and drug detection device; as such, Company 2 could not sell any such device to law enforcement; and Company 2 never secured investments from Institutional Investor 1 or Institutional Investor 2.

Investor 3

23. Between in or about October 2019 and in or about November 2019, a confidential human source (the "CHS" or "Investor 3")⁴ conducted consensually recorded telephone calls with JAMES JEREMY BARBERA, the defendant, and exchanged emails with BARBERA, at the direction of law enforcement. Based on my review of the recordings and the emails, my debriefings of the CHS, and my interviews of NASA employees, I have learned the following, in substance and in part:

a. On or about October 1, 2019, BARBERA, who was in New York, New York, and the CHS, who was in California, spoke by telephone, during which BARBERA falsely represented the following, in substance and in part: "We [i.e., Company 2] are in the process of raising capital, and we do have a planned IPO for next year" -- i.e., 2020.

b. On or about November 2, 2019, BARBERA and the CHS spoke by telephone, during which BARBERA stated the following, in substance and in part:

i. "The patents are owned by the United States government, by NASA. And they have been exclusively licensed to us [i.e., Company 2] for the life of the patents, so we are the only ones who can use them in the healthcare field. And they protected by the federal government."

ii. "NASA is not allowed to talk to individual investors. I tried that a few years ago."

iii. "I can actually send you a video of one of the engineers operating the device, which is one of our engineers at NASA. The NASA facility we work out of is in Mountain

4. Since in or about July 2016, the CHS has worked as a confidential human source for the FBI. In that capacity, the CHS has provided information and services to FBI, and assisted the FBI in investigations. The FBI has paid the CHS for certain of his/her assistance, but not in connection with this investigation, and has assisted the CHS with his/her immigration status. The CHS has no criminal history. The information provided by the CHS has been reliable and corroborated by other information, including documents.

View, California. It's called Ames Research Center, and it's on an air force base out there. . . . That's where we do our work."

iv. "We are going to be in the market next year, which we are very excited about," including with three law enforcement agency "clients" for "drug detection" using Company 2's devices.

v. "We are planning on going public next year. Hopefully, JP Morgan will lead the IPO. We're still talking to them and talking to a couple of other banks as well."

vi. "Finding drugs [in a person's breath] is easy. So it's actually a very simple process for us to look for drugs."

c. On or about November 2, 2019, BARBERA emailed the CHS and wrote the following, in substance and in part:

i. "Below is a video of [Individual 1], one of the NASA engineers who co-developed the sensor at NASA Ames in silicon valley [sic]. [Individual 1] demonstrates how to use the sensor." The email contained an internet link for a Vimeo video (the "Video").

ii. "We offered an equity bonus through October 31st to new shareholders who invest \$100K and above[.] The bonus was 50% warrant coverage (warrants are like stock options)[.] That basically means you get 50% additional stock at no additional charge[.] If we wrap up your investment next week I will extend the offer to you as well."

iii. BARBERA's signature block falsely represented that he was still Company 2's CEO.

d. The Video was uploaded to Vimeo by an account associated with BARBERA's child. During the Video, Individual 1 provided a demonstration of a breathalyzer device that purportedly could detect cancer in a person's breath.

e. Individual 1 was not a NASA engineer, and did not co-develop the NASA Patents or any of the NASA sensors.

f. On or about November 16, 2019, BARBERA and the CHS spoke by telephone, during which BARBERA stated the following, in substance and in part:

i. The license agreement "is completely exclusive to [Company 2] . . . for the length of the patents, which is twenty years."

ii. The CHS said, "I got the impression watching [the Video] that it's ready to go. And does it really work?" BARBERA falsely responded, "Yes, it's ready to go next year."

iii. BARBERA also falsely claimed that Company 2 had "contracts" with the State of Florida and the State of Colorado to supply law enforcement its breathalyzer device to test for marijuana, heroin, fentanyl, and cocaine, and was also in discussions with the Los Angeles Police Department to do the same.

iv. BARBERA further misrepresented: "We've actually signed a large agreement in England. We signed it a week ago. It's for basically a \$22 million investment that's going to close this year. And that's it, we are done. We are not raising any more money. . . . You may be among the last investors we take."

g. On or about November 18, 2019, BARBERA emailed the CHS a securities purchase agreement for an approximately \$250,000 investment in Company 2.

24. As discussed herein, in truth and in fact, and as JAMES JEREMY BARBERA, the defendant, well knew, Company 2 never developed a cancer and drug detection device; as such, Company 2 could not sell any such device to law enforcement; the Video falsely represented that the device could detect cancer; BARBERA was no longer Company 2's CEO; Individual 1 was not a NASA engineer, and did not co-develop the NASA Patents or any of the NASA sensors; Company 2 did not have an exclusive license agreement with NASA for the life of NASA Patents; Company 2 did not have an upcoming IPO; and Company 2 did not have a signed agreement for approximately \$22 million.

*BARBERA Misrepresents Company 2's
Technology at a Military Conference*

25. Based on my review of a video posted on YouTube, I have learned that on or about May 18, 2017, JAMES JEREMY BARBERA, the defendant, gave a presentation regarding Company 2 to a

military technology conference, during which he said, in substance and in part:

a. "This is the device. Very, very small. It is being manufactured in the United States using engineers from NASA and physicians from [University 1] so this is very much a U.S. initiative."

b. "So we're giving to law enforcement the tools that they've had for decades for alcohol, well, we're giving it to them now for marijuana. And it won't be limited to marijuana. It will be able to test for heroin, crack cocaine, methamphetamines, any illicit drugs."

c. "And our health-care purpose is cancer. 1,000 people die from cancer every hour in this country. We've developed the ability to detect lung cancer at Stage 1. . . . That will be out next year. It's going through the FDA this year. It's based on biomarker analysis and we'll go from lung cancer to breast cancer, ovarian, prostate, colon -- basically every form of cancer has a structure we understand from organic compounds, and we're not predicting it. We're finding it."

26. Based on my communications with representatives of the Food and Drug Administration ("FDA"), I have learned that Company 2 never submitted applications to the FDA for the review of any Company 2 medical devices.

27. As discussed herein, in truth and in fact, and as JAMES JEREMY BARBERA, the defendant, well knew, Company 2 never developed a cancer and drug detection device. Indeed, as noted above, NASA did not permit narcotics testing to take place on its campus.

BARBERA Misappropriates Company 2 Investor Funds

28. Based on my review of the Records, including bank records for JAMES JEREMY BARBERA, the defendant, and Company 2, I have learned the following:

a. BARBERA was the signatory for Company 2's bank accounts.

b. Between in or about 2013 and in or about 2020, BARBERA, CC-1, and others raised at least approximately \$12.2 million from investors in Company 2. Of this \$12.2 million, BARBERA raised approximately \$11.2 million.

c. BARBERA misappropriated approximately \$6 million, or approximately fifty percent, of the approximately \$12.2 million raised from Company 2 investors for his personal use, including as follows:

i. Approximately \$390,000 was used to pay BARBERA's personal credit card bills.

ii. Approximately \$273,000 was used to pay BARBERA's mortgage on his apartment on Central Park West in New York, New York, and other related expenses.

iii. Approximately \$281,000 was sent to BARBERA's two ex-wives, his children, and his mother.

iv. Approximately \$250,000 was transferred to other bank accounts that BARBERA also controlled.

v. Approximately \$202,000 was withdrawn as cash.

vi. Approximately \$90,000 was used to pay tuition for BARBERA's daughter's college at University 2.

vii. Approximately \$60,000 was used to pay tuition for BARBERA's daughter's private school in New York, New York.

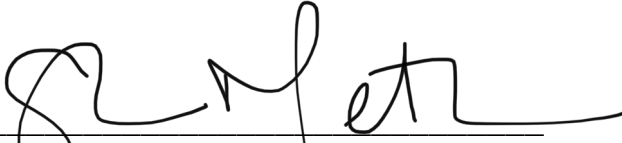
viii. Approximately \$37,000 was used to purchase jewelry and watches.

WHEREFORE, I respectfully request that a warrant be issued for the arrest of JAMES JEREMY BARBERA, the defendant, and that he be arrested and imprisoned, or bailed, as the case may be.

/s authorized electronic signature

JONATHAN H. POLONITZA
Special Agent
Federal Bureau of Investigation

Sworn to before me this
8th day of December, 2020



HON. SARAH NETBURN
United States Magistrate Judge
Southern District of New York