THE UNITED STATES DISTRICT COURT FOR THE SOUTHERN DISTRICT OF OHIO EASTERN DIVISION

CARLO M. CROCE,		: Case No. 2:17-CV-00338
	Plaintiff(s)	: : Judge Graham
vs.		: Magistrate Judge Elizabeth P. Deavers
DAVID A. SANDERS,		:
	Defendant(s)	: JURY TRIAL DEMANDED

FIRST AMENDED COMPLAINT

Plaintiff, Carlo M. Croce, for his First Amended Complaint against Defendant David A. Sanders, alleges as follows:

INTRODUCTION AND PARTIES

Dr. Carlo M. Croce

1. Plaintiff, Carlo M. Croce, M.D. is the John W. Wolfe Chair, Human Cancer Genetics at The Ohio State University ("OSU"). He is also the Director of the Human Cancer Genetics Program, the Director of the Institute of Genetics, Professor of Internal Medicine, and Chair of the Department of Molecular Virology, Immunology & Medical Genetics, all at OSU.

2. Dr. Croce is a pioneer of research into the genetic mechanisms of cancer. He began his research into genetic anomalies in cancer at a time when little was known of the human genome. His decades-long work thereafter uncovered the early events involved in the pathogenesis of leukemias and lymphomas, and lung, nasopharyngeal, head and neck, esophageal, gastrointestinal and breast cancers. His discoveries have led to revolutionary innovations in the development of novel and successful approaches to cancer prevention, diagnosis, monitoring and treatment, based on gene-target discovery, verification and rational drug development. For example, his discovery of the BCL2 gene and of the mechanisms of its activation have led to the discovery of a drug, ABT-199 or Venetoclax, for the treatment of chronic lymphocytic leukemia, the most common human leukemia.

3. Since 1975, Dr. Croce has received more than 64 awards for his research and discoveries in the field of genetics, including the Mott Award from the General Motors Cancer Foundation (1993), the Pezcoller Award from the American Association for Cancer Research (1999), the Clowes Memorial Award from the American Association for Cancer Research for his discoveries of the molecular mechanisms of leukemia (2006); and the InBev-Baillet Latour Fund International Health Prize (2013) and the 30th Annual Jeffrey A. Gottlieb Memorial Award for "his discovery that non-coding RNAs are involved in cancer pathogenesis" (2013).

4. On April 1, 2017, Dr. Croce received the 11th Annual AACR Margaret Foti Award for Leadership and Extraordinary Achievements in Cancer Research (the "Foti Award"). The "AACR" is the American Association for Cancer Research. The Award "recognizes a true champion of cancer research, an individual who embodies the sustained commitment of Margaret Foti to the prevention and cure of cancer," and is "given to an individual whose leadership and extraordinary achievements in cancer research or in support of cancer research have made a major impact on the field."

5. In presenting the Foti Award to Dr. Croce on April 1, 2017, the AACR stated that it chose Dr. Croce because of his consistent and long-standing impact on the translation of fundamental cancer mechanisms to clinical applications and his

extraordinary scientific leadership in the national and international scene, including research administration and mentorship of talented young investigators. Specifically, the

AACR noted the following:

- Dr. Croce's groundbreaking research has involved the positional cloning and characterization of numerous genes at chromosomal translocation breakpoints in cancer cells and the masterful translation of these discoveries to strategies for cancer prevention, early detection, and therapy.
- More recently, Dr. Croce's work on understanding the role of microRNAs in cancer pathogenesis has identified specific microRNA signatures associated with the diagnosis and prognosis of certain cancers and has defined microRNAs that function as oncogenes or tumor suppressors.
- In addition to his paradigm-shifting work, Dr. Croce has had an immense impact on both the international and national cancer research communities.

6. Dr. Croce has been a Member of the National Academy of Sciences for more than twenty years. Scientists are elected by their peers to membership in the National Academy of Sciences for their outstanding contributions to research. Dr. Croce is also a Member of the American Academy of Arts and Sciences and a Member of the National Academy of Medicine. He is also a Fellow of the Academy of the American Association for Cancer Research, a Fellow of the American Association for the Advancement of Science, and a member of The National Academy of Inventors.

7. Other highly respected scientists in Dr. Croce's field have described Dr. Croce as a distinguished scientist who has made major contributions to cancer research. One such scientist stated that "[o]ur current understanding of genetic mechanisms in cancer is based to a large extent on Croce's fundamental discoveries on chromosomal rearrangements and on the unique role of microRNAs in cancer," and "[h]is discoveries are fundamental guideposts for current and future efforts to defeat cancer."

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8. Dr. Croce's research has been reported in the major research journals, including Nature, Science, Cell, Cancer Cell, Journal of Clinical Oncology, The Lancet Oncology, Journal of the National Cancer Institute and Cancer Research, and the Proceedings of the National Academy of Sciences, among many others. Dr. Croce is one of the most cited scientists in the world.

9. Over the course of Dr. Croce's more than forty-five year career, approximately 398 papers have been published in scientific journals reporting scientific research done in Dr. Croce's laboratory and written either by Dr. Croce or by those performing research under his supervision in his laboratory (hereinafter referred to as "Research Papers").

10. As is standard in the scientific community, Dr. Croce is listed as either the first or last author on all those Research Papers.

11. The only Research Papers that can honestly be called "Dr. Croce's papers" are those for which a major portion of the research was done in his laboratory and the paper was written by Dr. Croce or by those working in his laboratory under his supervision (hereinafter "Dr. Croce's Research Papers").

12. In addition, over those forty-five years, Dr. Croce has written, either alone or with colleagues, more than 150 additional papers published in scientific journals or books that are not Research Papers but are instead papers that either review work done on a particular scientific issue ("Review Papers") or comment on papers done by others ("Commentary Papers"). On those Review Papers and Commentary Papers, Dr. Croce is typically listed as either the first, last, or only author.

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13. In the entirety of Dr. Croce's forty-five years of scientific research, not a single one of Dr. Croce's Research Papers or Review Papers has been retracted.

14. In the entirety of those forty-five years, only one of Dr. Croce's Commentary Papers has been retracted. That retraction was initiated by Dr. Croce himself because the journal involved declined to include a sentence in the Commentary Paper that Dr. Croce believed needed to be included. Dr. Croce's direction to the journal was either to "include [his] comments on Cell or I withdraw the paper."

15. Each of Dr. Croce's 398 Research Papers displays images of cells and other scientific information (called "figures," many of which contain "sub-figures"). Most of Dr. Croce's Research Papers have multiple figures and many figures have multiple sub-figures. Of Dr. Croce's 398 Research Papers, 9 of them (about 2.26%) have been the subject of corrections to a figure or sub-figure. Of the approximately 4,100 figures and sub-figures in Dr. Croce's 398 Research Papers, fewer than 20 (less than one-half of one percent) have been the subject of any correction. None of those corrections affected the scientific results of any of the papers. All of them were the result of honest error in the construction of the figures or sub-figures for publication. The scientific conclusions reached in every one of those papers have been confirmed by subsequent research conducted and reported by other scientists at other institutions.

16. Three of Dr. Croce's 398 Research Papers (less than 0.8%) have been corrected for "text overlap." Each of those corrections specifically states that no concerns have been raised regarding the originality, the results, or the conclusions of the research reported in those Research Papers. One Review Paper is currently being corrected for text overlap.

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17. In his more than 45 years of scientific research, Dr. Croce has never committed or been found to have committed any scientific misconduct or fraud.

18. In addition to Dr. Croce's Research Papers and his Review and Commentary Papers, Dr. Croce has been listed on additional papers for which he is neither the first nor last author, but was listed in the middle of the list of authors.

19. Where Dr. Croce is listed as a middle author, the research described typically did not take place in his lab or under his supervision, and neither Dr. Croce nor anyone under his supervision wrote the paper. In many of those papers, his participation was to contribute important reagents or genetically modified mice to the laboratory in which the work was done.

20. It is not the custom in the scientific community to identify a paper by the name of a middle author.

21. It has not been a standard practice among research scientists or scientific journals to hold middle authors responsible for portions of research and manuscripts that they did not conduct or prepare, and that were conducted and prepared outside of their control and in the labs of others. Rather, middle authors have been more consistently considered to be responsible only for the contributions they made to the project.

22. Dr. Croce is not a public official. Dr. Croce is a cancer research scientist who is known within his scientific discipline, but he has not achieved general fame or notoriety in the community, nor has he had pervasive involvement in the affairs of society. Dr. Croce is therefore not a public figure. Dr. Croce has not thrust himself to the forefront of any public controversies in order to influence the resolution of the issues involved. Dr. Croce is therefore not a limited purpose public figure. Dr. Croce was a

private figure at the time of the defamatory statements described herein, who had relinquished no part of his interest in the protection of his own good name.

David A. Sanders PhD

23. Defendant, David A. Sanders, Ph.D., is an Associate Professor at Purdue University in the Department of Biological Sciences. On information and belief, Defendant Sanders has been an Associate Professor at Purdue for approximately twenty years.

24. On information and belief, Defendant Sanders has been the first author on ten papers and the last author on about nine.

JURISDICTION AND VENUE

25. Dr. Croce is a citizen of the United States and Ohio and a resident of Franklin County, Ohio.

26. Sanders is a resident of Tippecanoe County, Indiana.

27. This court has personal jurisdiction over Defendant pursuant to Ohio Revised Code §2307.382(A)(6) and Ohio Civil Rule 4.3(A)(9) because Defendant "caus[ed] tortious injury in this state to [Plaintiff] by an act outside this state committed with the purpose of injuring persons, when he might reasonably have expected that some person would be injured thereby in this state."

28. Venue is proper in this court pursuant to Ohio Civil Rule 3(B)(7).

STATEMENT OF FACTS

29. On or about November 23, 2016, Dr. Croce received a letter from New York Times reporter James Glanz ("Glanz"). The letter was addressed to both Dr. Croce and his employer, The Ohio State University. In that letter, Mr. Glanz stated that he had

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questions he wanted to "put urgently" to Dr. Croce and OSU "as part of an article" Glanz was preparing.

30. The Defamatory Letter included false and defamatory statements that Defendant Sanders made to Glanz about Dr. Croce. Defendant Sanders falsely stated to Glanz (and Glanz repeated in his letter to OSU) that "image fabrication, duplication and mishandling, and plagiarism in Dr. Croce's papers is routine" and that Dr. Croce is "knowingly engaging in scientific misconduct and fraud." These are factual statements that are verifiably false.

31. Dr. Croce has not engaged in "routine" "image fabrication, duplication or mishandling" or "plagiarism." Nor has Dr. Croce "knowingly engag[ed] in scientific misconduct and fraud."

32. Defendant Sanders' false and defamatory statements published to the New York Times reporter and republished by that reporter to OSU reflect injuriously on Dr. Croce's reputation and adversely affect Dr. Croce in his profession as a scientist and leading cancer researcher. Sanders knew or should have known that those false and defamatory statements would be republished in Ohio.

33. Defendant Sanders also published additional false and defamatory statements to the New York Times, which republished those statements on March 8, 2017, on the front page of the digital version of the New York Times in an article with the headline "Years of Ethics Charges, but Star Cancer Researcher Gets a Pass. Dr. Carlo Croce was repeatedly cleared by Ohio State University, which reaped millions from his grants. Now, he faces new whistle-blower accusations." The article is attached hereto and incorporated herein as Exhibit A (hereinafter the "Defamatory Article").

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34. On that same day, the New York Times featured the Defamatory Article in both its Twitter feed and its Facebook page under the tag line "A star cancer researcher accused of fraud was repeatedly cleared by Ohio State, which reaps millions from his grants."

35. On March 8, 2017, Sanders (whose Twitter handle is @DavidSandersRep) also posted the Defamatory Article to his Twitter page—twice, in case the first posting was "too early in morning"—claiming that the article "features my role as a data-manipulation archaeologist."

36. On March 9, 2017, the Defamatory Article was published on the front page of the New York Times' print version, above the fold, under the headline "Years of Questions but Researcher Gets a Pass."

37. The March 8, 2017, digital version of the Defamatory Article was published to tens of millions of "unique visitors" in the United States and around the world. The defamatory social media posts on Twitter and Facebook extended the reach of the digital version of the Defamatory Article still farther. The New York Times reports that it has more than three million subscribers worldwide.

38. Shortly after its publication, the New York Times reported that the Defamatory Article was Number One on the list of "Most Popular" articles in the digital version of The New York Times. On the day of, and within days shortly thereafter, 444 readers had posted comments about it on the New York Times website.

39. The Defamatory Article states:

"Since 2014, another critic, David A. Sanders, a virologist who teaches at Purdue University, has made claims of falsified data and plagiarism directly to scientific journals where more than 20 of Dr.

Croce's papers have been published. It's a 'reckless disregard for the truth,' Dr. Sanders said in an interview."

40. Defendant Sanders' statement that Dr. Croce has a "reckless disregard for the truth" is a statement of fact that is verifiably false. Dr. Croce does not disregard the truth at all, let alone recklessly disregard it. Dr. Croce's research and the research conducted in Dr. Croce's laboratory is in fact conducted carefully and with an unrelenting goal of seeking the scientific truth.

41. Defendant Sanders made the above-quoted false and defamatory statement with knowledge that it was false and with reckless disregard of whether it was false or not. Defendant Sanders therefore published the statement with actual malice. Defendant Sanders also failed to act reasonably in attempting to discover the truth or falsity of that defamatory statement before publishing it to the New York Times (which republished it) and was therefore negligent in publishing it.

42. The Defamatory Article also states:

"After receiving several tips on Dr. Croce's work, Dr. Sanders said, he decided to undertake yet another moonlighting effort: as a 'freelance ethicist.' 'A lab that is engaging in violating scientific norms is being rewarded for that very effort,' he said."

43. Dr. Sanders' statement that Dr. Croce's work or his laboratory is "engaging in violating scientific norms" and "being rewarded for that very effort" is a factual statement that is verifiably false.

44. The "scientific norms" for reporting the results of scientific research are set forth in the "Federal Policy on Research Misconduct." The Federal Policy on Research Misconduct is administered by the Federal Office of Research Integrity ("ORI"), which is an office within the United States Department of Health and Human Services.

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45. The Federal Policy on Research Misconduct is published in the Federal Register and is revised periodically. The policy applicable to any specific allegation of scientific misconduct is the policy in effect at the time the paper in question is published. The Federal Policy on Research Misconduct's definition of research misconduct expressly states that "Research misconduct does not include honest error or differences of opinion."

46. Dr. Croce has never committed research misconduct, and has never been found to have committed research misconduct. Therefore, neither Dr. Croce nor his lab has been "rewarded" for "violating scientific norms."

47. Then on or about March 21, 2017, Defendant Sanders made additional false and defamatory statements about Dr. Croce to a reporter for an affiliate of the USA TODAY Network. Those statements were published in USA TODAY and in the affiliate's newspaper, the Lafayette Journal & Courier (the "USA TODAY Article"). A copy of the USA Today Article containing Defendant Sanders' additional false and defamatory statements is attached hereto as Exhibit B.

48. Defendant Sanders stated to the reporter that "Dr. Croce falsified data or plagiarized text in more than two dozen articles Croce has authored." Defendant Sanders also stated with regard to Dr. Croce that, "If you wanted to just make up data you could do it in a way that's much more difficult to detect, but they didn't because they were able to get away with this relatively simple manipulation," and "[t]hey continued to do it over and over again."

49. These statements alleging that Dr. Croce "falsified data or plagiarized text in more than two dozen articles," that he "just ma[d]e up data," that he was able "to get

away with" data manipulation, and that he "d[id] it over and over again" are factual statements that are defamatory and verifiably false.

50. On March 23, 2017, Sanders posted the USA Today Article, as published at jconline.com, to his Twitter page, and specifically included @jamesglanz in the post, to ensure the post came to the attention of the New York Times. NYT's Glanz then "retweeted" the article to his Twitter followers. Sanders posted the same article to his Twitter page again on March 29, 2017, again posting it twice. He also re-posted the Defamatory Article to his Twitter page on March 29, 2017.

51. Defendant Sanders made all of the above-quoted false and defamatory statements with knowledge that they were false and with reckless disregard of whether they were false or not. Defendant Sanders therefore published the statements with actual malice. Defendant Sanders also failed to act reasonably in attempting to discover the truth or falsity of those defamatory statements before publishing them.

52. Defendant Sanders expressly aimed all of these false and defamatory statements at Ohio and purposely availed himself of the privilege of causing a consequence in Ohio. Specifically, defendant Sanders knew or should have known at the time he published his false and defamatory statements about Dr. Croce that:

• Dr. Croce is an esteemed and distinguished professor and scientist who has been employed by OSU for thirteen years during which time he has been the John W. Wolfe Chair in Human Cancer Genetics at OSU; Professor and Chairman, Dept. of Cancer Biology and Genetics (formerly the Dept. of Molecular Virology, Immunology and Medical Genetics) at the OSU School of Medicine; the Director, Institute of Genetics at OSU;

Director of Human Cancer Genetics Program at OSU; and since 2005, has held the title of Distinguished University Professor at OSU.

- Dr. Croce has received more than half of his approximately sixty-four awards while he has been at OSU.
- Dr. Croce's reputation was at the time of Sanders' false and defamatory statements and still is centered in Ohio and his professorship at OSU.
- Every scientific paper published during the thirteen years Dr. Croce has been at OSU and on which Dr. Croce has been listed as a coauthor has identified Dr. Croce as a professor at OSU.
- Tens of millions of dollars in federal and charitable research grants to OSU are the direct result of the fact that Dr. Croce is the principal investigator on the projects funded by those grants.
- Based on all of the above, any damage to Dr. Croce's reputation resulting from Sanders' defamatory statements will be felt immediately and directly by the State of Ohio and its educational institution, OSU, which was created by and exists under the statutory laws of the State of Ohio.
- Defendant Sanders knew or should have known all of these facts at the time that he published his false and defamatory statements about Dr. Croce. Sanders therefore knew or should have known that any damage to Dr. Croce's reputation will be felt immediately and directly by and in the State of Ohio.

53. Sanders' false and defamatory statements were intentionally directed to and impugned Dr. Croce's research activities in Ohio. Sanders knew that the brunt of the harm from his false and defamatory statements would be suffered in Ohio.

54. Defendant Sanders caused tortious injury in this state by an act outside this state committed with the purpose of injuring an Ohio resident, when he knew or reasonably expected that an Ohio resident would be injured thereby in Ohio.

COUNT I

(Defamation)

55. Plaintiff repeats and incorporates by reference herein each of the preceding paragraphs.

56. All of the above statements reflect injuriously on Dr. Croce's reputation and expose him to public hatred, contempt, ridicule, shame or disgrace. They also affect Dr. Croce adversely in his trade, business and profession. They are all therefore defamatory per se.

57. Because Defendant Sanders' statements constitute defamation per se, damages and actual malice are presumed to exist. The defamatory statements also proximately caused Dr. Croce damages in the form of injury to his reputation as a highly respected scientist and cancer researcher.

58. By publishing the false and defamatory statements to the New York Times reporter, Sanders knew and expected that the New York Times would republish them. The New York Times did in fact republish the statements in Paragraphs 28, above, to Dr. Croce's employer in Ohio. The New York Times also republished the statements in Paragraphs 39 and 42, above, in the Defamatory Article.

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59. By publishing the false and defamatory statements described in paragraph 48, above, to a reporter in the USA TODAY Network, Sanders knew and expected that those false and defamatory statements would be republished. Those false and defamatory statements were in fact republished in USA TODAY, spreading Sanders' falsehoods about Dr. Croce nationwide.

60. All of the defamatory statements uttered by Sanders and described above are false, and were false when made. Sanders knew or should have known the statements were false when made.

61. Sanders made the defamatory statements with actual malice and wrongful and willful intent to injure Dr. Croce. Sanders made those statements with knowledge of their falsity or with reckless disregard for their truth or falsity. Sanders knew or should have known that the statements were injurious to Dr. Croce's professional reputation.

62. Sanders never contacted or communicated with or to Dr. Croce prior to publishing any of the above false and defamatory statements about Dr. Croce. Dr. Croce does not know, and had never heard of, Sanders prior to receiving the letter that Glanz sent to Dr. Croce and OSU in Ohio.

63. As a proximate result of Defendant's publication of the above-described false and defamatory statements, Dr. Croce has suffered and will continue to suffer actual and material harm to his reputation and standing in the community, personal humiliation, mental and emotional anguish and suffering, as well as monetary damages in an amount to be determined at trial.

64. In making the defamatory statements, Sanders acted intentionally, maliciously, willfully and with the intent to injure Dr. Croce and/or to benefit himself.

65. Sanders is liable to Dr. Croce for punitive damages in an amount to be proven at trial.

COUNT II

(Intentional infliction of emotional distress)

66. Plaintiff repeats and incorporates by reference herein each of the preceding paragraphs.

67. By making the false and defamatory statements described above, Defendant either intended to cause Dr. Croce emotional distress, or knew or should have known that his conduct would result in serious emotional distress.

68. Defendant's conduct, as described herein, was extreme and outrageous, going beyond the bounds of decency. An average member of the community, including of the scientific community, would feel anger and resentment at Defendant's conduct, and would consider the conduct to be outrageous and intolerable.

69. As a further result of Defendant's actions, Dr. Croce has suffered serious mental anguish and personal humiliation, all of a nature that no reasonable person could or should be expected to endure.

WHEREFORE, Plaintiff Carlo M. Croce demands judgment against Defendant David A. Sanders for compensatory damages in an amount to be proven at trial, punitive damages in an amount to be proven at trial, all costs, interest, attorneys' fees and other amounts permitted by law, and such other and further relief as this Court may deem just and proper. /s/ Thomas W. HillThomas W. Hill(0012182)Loriann E. Fuhrer(0068037)KEGLER, BROWN, HILL & RITTERA Legal Professional Association65 E. State Street, Suite 1800Columbus, Ohio 43215(614) 462-5400 Phone(614) 464-2634 Faxthill@keglerbrown.comIfuhrer@keglerbrown.comAttorneys for Plaintiff, Carlo M. Croce, M.D.

CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing was filed this 31st day of May, 2017, using the Court's CM/ECF system which will send electronic notification to all counsel of record in this action.

<u>/s/ Thomas W. Hill</u> Thomas W. Hill