

In the
United States Court of Appeals
for the **Second Circuit**

AUGUST TERM 2017

No. 16-819-cr

UNITED STATES OF AMERICA,
Appellee,

v.

CHENG LE, AKA WILLIAM LEE, AKA DANIEL CHUNN,
AKA STEVEN PHANATASIO,
Defendant-Appellant.

On Appeal from the United States District Court
for the Southern District of New York

ARGUED: MAY 14, 2018
DECIDED: AUGUST 27, 2018

Before: SACK and RAGGI, *Circuit Judges*, GARDEPHE, *District Judge*.*

* Judge Paul G. Gardephe, of the United States District Court for the Southern District of New York, sitting by designation.

On appeal from a judgment of the United States District Court for the Southern District of New York (Nathan, J.), defendant, who ordered the lethal toxin ricin over the internet for the stated purpose of facilitating murder, challenges his conviction under the Biological Weapons Anti-Terrorism Act of 1989 (the “Biological Weapons Act”), Pub. L. No. 101–298, 104 Stat. 201 (1990) (codified as amended at 18 U.S.C. §§ 175–178 (2002)), and related federal statutes, arguing that principles of federalism preclude construing the Biological Weapons Act to reach “purely local” criminal conduct such as common law murder. *Bond v. United States*, 134 S. Ct. 2077, 2083 (2014). Defendant further challenges the constitutionality of the Biological Weapons Act both on its face and as applied.

AFFIRMED.

ANDREW D. BEATY, Assistant United States Attorney (Ilan Graff, Won S. Shin, Assistant United States Attorneys, *on the brief*), for Geoffrey S. Berman, United States Attorney for the Southern District of New York, New York, New York, *for Appellee*.

TINA SCHNEIDER, Law Office of Tina Schneider, Portland, Maine, *for Defendant-Appellant*.

REENA RAGGI, *Circuit Judge*:

Defendant Cheng Le stands convicted after a jury trial in the United States District Court for the Southern District of New York (Alison J. Nathan, *Judge*) of three crimes: (1) attempting to acquire the lethal biological toxin ricin in violation of the Biological Weapons Anti-Terrorism Act of 1989 (the “Biological Weapons Act”), Pub. L. No. 101–298, 104 Stat. 201 (1990) (codified as amended at 18 U.S.C. §§ 175–178 (2002)); (2) using a false name to conduct the aforementioned unlawful activity by means of the United States Postal Service in violation of 18 U.S.C. § 1342; and (3) aggravated identity theft in connection with his Biological Weapons Act crime in violation of 18 U.S.C. §§ 1028A and 2. Le here appeals his conviction, arguing through counsel that (1) principles of federalism preclude construing the Biological Weapons Act to reach his criminal conduct, which was intended only to facilitate “local” murder, *Bond v. United States*, 134 S. Ct. 2077, 2083 (2014); and (2) in any event, the statute is unconstitutional both on its face and as applied in this case. In a separate *pro se* submission, Le also complains of ineffective assistance by trial counsel.

For reasons explained herein, we conclude that Le’s counseled arguments fail on the merits. Le’s *pro se* ineffective assistance claim is more properly the subject of collateral review and, thus, we decline to

address it on direct appeal. Accordingly, we affirm the judgment of conviction on all counts.¹

BACKGROUND

I. The Prosecution Case

A. Le Orders Ricin on the Dark Net

Over the course of several weeks in December 2014, defendant Le, a self-styled broker of luxury goods between the United States and China, repeatedly accessed a “Dark Net” marketplace in an attempt to acquire ricin, a biological toxin derived from the seeds of the castor oil plant. Ricin is lethal in even small doses when ingested, injected, or simply inhaled. It has no known antidote and is generally undetectable in autopsies.

The “Dark Net” is an area of the internet accessible only through anonymization software that obscures users’ internet protocol addresses and filters their traffic through a series of worldwide nodes. Such software makes it difficult, even for law enforcement officials, to identify Dark Net users or their locations. Dark Net users adopt monikers to interact anonymously with one another in various formats, including online marketplaces. Dark Net marketplaces operate similarly to ordinary internet marketplaces

¹ Insofar as Le raises still new equal protection and sufficiency challenges to conviction in a reply brief filed after the government responded to his initial submission, we deem those arguments abandoned and do not address them here. See *United States v. George*, 779 F.3d 113, 119 (2d Cir. 2015). Even were we to do so, however, we would conclude that they are meritless.

(e.g., eBay), in that vendors list items for sale and exchange messages with potential buyers to negotiate and effectuate transactions. In Dark Net marketplaces, however, communications between vendors and buyers are usually encrypted, and transactions overwhelmingly involve contraband.

Le's first Dark Net communication about ricin occurred on December 3, 2014, when, using the moniker "WhenInDoubt," he initiated contact with a vendor operating under the moniker "Dark_Mart" and asked: "Any ways[,] this might sound blunt but do you sell ricin?" Trial Tr. at 51–52. Le explained that he had seen several Dark Net listings suggesting that Dark_Mart had ricin in stock. What Le did not then know was that Dark_Mart was an online identity assumed by Mark Walker, an online covert employee of the Federal Bureau of Investigation.

Between December 3 and 22, 2014, Le exchanged more than two dozen encrypted messages with Walker in which Le held himself out as a broker acting on behalf of persons interested in acquiring ricin. Le stated that he was seeking a source of "good quality" ricin "ASAP" and that he "already had buyers lining up" for the product. *Id.* at 55. Le stated that "three to five lethal doses would be enough," adding that a client might want Walker's "professional opinion" on "how death would end up looking . . . under forensic examination." *Id.* at 59. Le would subsequently describe the client's intended victim as a middle-aged, 200-pound male.

Le specifically solicited Walker's advice about administering ricin both by injection and ingestion. As to the former, Le queried whether "kill[ing]" a target with a ricin injection while he was hospitalized would avoid suspicion because "hospitalized people already have needles in them." *Id.* at 61–62. Later, after confirming with Walker that ricin had no antidote and did not appear in autopsies, Le described a plan for ricin's ingestion through "capsules," "pills," or "tablets" "disguise[d] as medicine." *Id.* at 67. A single ricin pill could be added to "a bottle of normal pills" that looked "identical," so that when "the target takes the medicine every day, sooner or later he'd ingest that poisonous pill and die." *Id.* Thus, Le observed, "[e]ven if there is a murder investigation, they won't find any more toxin"; the plan was "100 percent risk-free." *Id.*

Le told Walker that "simple and easy death pills" would "become best sellers." *Id.* Indeed, he declared that "it is death itself we're selling here, and the more risk-free, the more efficient we can make it, the better." *Id.* at 68. Toward that end, Le said he would be "trying out new" ricin delivery "methods in the future." *Id.*

B. Le Orders Ricin in the Name Daniel Chunn and Arranges for Delivery by Mail

Following these exchanges, on December 18, 2014, Le—now using the moniker "fnufnu"—placed an order with Walker for "one bottle of [vitamin] pills with one poisonous pill in there." *Id.* at 74.²

² "WhenInDoubt" was the moniker for Le's vendor account, and the Dark Net marketplace through which he and Walker were dealing did not allow vendor accounts to purchase

Le instructed Walker to add an ultraviolet chemical to the ricin pill so that it could be identified by blacklight. Le also ordered some “extra loose powder/liquid ricin” — “[e]nough to poison some small animals will be good” — so that he could “test something out.” *Id.* Le agreed to pay for the order with the equivalent of \$300 in Bitcoin,³ and directed Walker to make delivery by mail addressed to “Daniel Chunn” at a Manhattan location.

Daniel Chunn is, in fact, the name of a Texas resident who had lost his wallet in March 2013 and reported identity theft to the authorities in the summer of that year. Chunn had never been in New York and had no familiarity with Le, the Dark Net, or the monikers “WhenInDoubt” and “fnufnu.”

C. The Controlled Delivery to Le

Investigation revealed that the Manhattan delivery address Le provided to Walker belonged to a UPS store, and that Le picked up mail from a post office box at that location. After surveilling Le visiting the UPS store, FBI agents prepared for a controlled delivery of the December 18 ricin order to that location. The package, which was sent via the United States Postal Service, contained a vitamin

items from other vendor accounts. Thus, Le placed this order through his buyer account with the moniker “fnufnu.”

³ Bitcoin is a digital currency that is decentralized and pseudonymous, permitting online vendors and customers to maintain their anonymity by transferring the currency directly between their Bitcoin accounts, which contain no identifying information about either user. *See United States v. Ulbricht*, 858 F.3d 71, 83 n.3 (2d Cir. 2017).

bottle that substituted a sham ricin pill for the ordered toxin, as well as a vial of sham ricin powder hidden inside a flashlight.

On December 23, 2014, FBI agents watched Le enter the UPS store. As observed on other occasions, he was wearing latex gloves. At the store, Le retrieved the controlled delivery package, opened it, discarded the shipping material, and carried the contents back to his nearby apartment. Soon after Le returned to his apartment, FBI agents entered the premises pursuant to a search warrant and arrested Le. In the ensuing search of Le's apartment, agents recovered the controlled-delivery pill bottle—now opened—containing the sham ricin pill, as well as the flashlight containing the vial of sham ricin powder. They also seized a quantity of castor seeds that had not been part of the delivery. The agents took photographs of Le's laptop computer, which showed that the device was then logged into Le's personal email account as well as to the Dark Net accounts for WhenInDoubt and fnufnu.

II. The Defense Case

Testifying in his own defense, Le denied any knowledge that ricin was being sent to him, and stated that a shipping associate, whom he identified as "Michael Lin," had used the laptop computer photographed by agents at the time of Le's arrest.

III. Conviction

On August 27, 2015, a jury found Le guilty on all three counts charged. On March 8, 2016, the district court sentenced Le to a total

of 192 months' (*i.e.*, 16 years') incarceration to be followed by five years' supervised release, and imposed a \$300 special assessment. This timely appeal followed.

DISCUSSION

I. Biological Weapons Act Challenges

A. Standard of Review

Le argues that his conviction must be vacated because (1) principles of federalism do not permit the Biological Weapons Act to be construed to reach his "purely local" criminal conduct, *Bond v. United States*, 134 S. Ct. at 2083; and (2) in any event, that statute is unconstitutional both on its face and as applied.

Le acknowledges that he did not raise these arguments before the district court. Thus, we review only for plain error. *See* Fed. R. Crim. P. 52(b); *United States v. Rybicki*, 354 F.3d 124, 128–29 (2d Cir. 2003) (*en banc*) (applying plain error review to constitutional vagueness challenge); *United States v. Santiago*, 238 F.3d 213, 215 (2d Cir. 2001) (applying plain error review to claim that criminal statute exceeded Congress's Commerce Clause authority). Le cannot avoid plain error review by recasting his statutory challenges as a jurisdictional argument that the indictment in his case failed to state a crime. *See United States v. Yousef*, 750 F.3d 254, 260 (2d Cir. 2014) ("[A]ppeals that call into question the government's authority to bring a prosecution or congressional authority to pass the statute in question are generally not jurisdictional." (internal quotation marks

omitted)); *United States v. Rubin*, 743 F.3d 31, 38–39 (2d Cir. 2014) (explaining that properly to invoke subject-matter jurisdiction, indictment “need only allege that a defendant committed a federal criminal offense at a stated time and place in terms plainly tracking the language of the relevant statute”).

To demonstrate plain error, Le must show (1) error that (2) is clear or obvious under current law; (3) affects his substantial rights, which generally means affects the outcome of the district court proceedings; and (4) seriously affects the fairness, integrity, or public reputation of judicial proceedings. *See United States v. Marcus*, 560 U.S. 258, 262 (2010); *accord United States v. Boyland*, 862 F.3d 279, 288–89 (2d Cir. 2017). He fails to do so here.

B. The Biological Weapons Act

To explain, we begin with a brief discussion of the challenged statute. In enacting the Biological Weapons Act, Congress identified two purposes: “(1) [to] implement the Biological Weapons Convention, an international agreement unanimously ratified by the United States Senate in 1974 and signed by more than 100 other nations”; and “(2) [to] protect the United States against the threat of biological terrorism.” 18 U.S.C. § 175 note (Declaration of Purpose and Intent); *see* Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxic Weapons and on Their Destruction (the “Biological Weapons Convention”), *opened for signature* Apr. 10, 1972, 26 U.S.T. 583, 1015 U.N.T.S. 163 (entered into force Mar. 26, 1975). The Convention aims

to “exclude completely the possibility” of biological agents and toxins “being used as weapons” and, toward that end, requires, *inter alia*, that each State signatory, “in accordance with its constitutional processes,” implement “any necessary measures” to prohibit the proliferation of such weapons within its territorial jurisdiction. Biological Weapons Convention, *supra*, 1015 U.N.T.S. at 164–67.

In furtherance of its stated statutory purposes, the Biological Weapons Act criminalizes certain conduct. We highlight the language most pertinent to Le’s conviction.

Whoever knowingly develops, produces, stockpiles, transfers, acquires, retains, or possesses any biological agent, toxin, or delivery system for use as a weapon, or knowingly assists a foreign state or any organization to do so, or attempts, threatens, or conspires to do the same, shall be fined under this title or imprisoned for life or any term of years, or both. There is extraterritorial Federal jurisdiction over an offense under this section committed by or against a national of the United States.

18 U.S.C. § 175(a) (emphasis added). The Act defines biological “toxin” to mean,

the toxic material or product of plants, animals, microorganisms (including, but not limited to, bacteria, viruses, fungi, rickettsiae or protozoa), or infectious substances, or a recombinant or synthesized molecule, whatever their origin and method of production, [including]

- (A) any poisonous substance or biological product that may be engineered as a result of biotechnology produced by a living organism; or
- (B) any poisonous isomer or biological product, homolog, or derivative of such a substance[.]

Id. § 178(2). Le cannot dispute that ricin, a highly lethal toxic protein naturally found in and extracted from the seeds of the castor oil plant, clearly falls within this definition. *See, e.g., United States v. Levensderis*, 806 F.3d 390, 395 (6th Cir. 2015) (affirming § 175(a) conviction for possession of ricin).

The statute defines the phrase “for use as a weapon” to “include[] the development, production, transfer, acquisition, retention, or possession of any biological agent, toxin, or delivery system for other than prophylactic, protective, bona fide research, or other peaceful purposes.” 18 U.S.C. § 175(c). In effect, this definition presumes that a biological toxin is “for use as a weapon” unless its use falls within one of the specified permitted purposes. Le does not dispute that his attempt to acquire ricin in order to “sell[]” “death” to clients intent on murder falls within this statutory definition. Trial Tr. at 67–68.

C. The Federalism Challenge

Le nevertheless argues that principles of federalism do not permit the statute to support his conviction here because his attempted acquisition of ricin was in furtherance of a single murder, effectively a common law crime entrusted by federalism to local law

enforcement. Le maintains that this conclusion is compelled by *Bond v. United States*, 134 S. Ct. 2077. That case does not, in fact, support Le’s federalism challenge.

1. *Bond v. United States*

As the Supreme Court itself recognized, *Bond* is an “unusual,” even “curious,” case. *Id.* at 2090, 2092–93. At issue there was a conviction under the Chemical Weapons Convention Implementation Act of 1998 (the “Chemical Weapons Act”). *See* 18 U.S.C. § 229(a)(1).⁴ Like the Biological Weapons Act, that statute proscribes all uses of chemical weapons not expressly permitted. Thus, the statute criminalizes the knowing “use [of] . . . any chemical weapon,” except for “peaceful purpose[s] related to . . . industrial, agricultural, research, medical, . . . pharmaceutical[,] . . . or other activity.” *Id.* §§ 229(a)(1), 229F(7). It defines a “chemical weapon” as “[a] toxic chemical and its precursors,” *id.* § 229F(1), and it defines “toxic chemical” as “any chemical which through its chemical action on life processes can cause death, temporary incapacitation or permanent harm to humans or animals,” *id.* § 229F(8)(A), except when used for a “peaceful purpose” related to “industrial, agricultural, research, medical, . . . pharmaceutical[,] . . . or other activity,” *id.* § 229F(1), (7).

⁴ The Chemical Weapons Act implements the Convention on the Prohibition of the Development, Production, Stockpiling, and Use of Chemical Weapons and on Their Destruction (the “Chemical Weapons Convention”), *opened for signature* Jan. 13, 1993, S. Treaty Doc. No. 103-21, 1974 U.N.T.S. 317 (entered into force Apr. 29, 1997), which *Bond* describes as “a treaty about chemical warfare and terrorism,” 134 S. Ct. at 2090.

While most prosecutions under the Chemical Weapons Act have concerned “terrorist plots or the possession of extremely dangerous substances with the potential to cause severe harm to many people,” *Bond v. United States*, 134 S. Ct. at 2092 (collecting cases), in *Bond*, the government applied it to “a purely local crime: an amateur attempt by a jilted wife to injure her husband’s lover” by putting chemical irritants on the victim’s door knob, car door, and mail box in the hope of inducing a rash, *id.* at 2083, 2085 (noting that victim sustained only minor burn because substances were easily visible and, therefore, largely avoided).

In holding that the Chemical Weapons Act did not reach such a “common law assault,” the Supreme Court ruled that the statute “must be read consistent with principles of federalism inherent in our constitutional structure,” specifically, the principle “leaving the prosecution of purely local crimes to the States” in the absence of a “clear indication” of contrary congressional intent. *Id.* at 2087–88, 2090. The Court did not locate such a clear intent in the Chemical Weapons Act. Specifically, it did not locate that intent in the statute’s expansive definition of “chemical weapon.” To the contrary, it identified “ambiguity” in the term because the definition’s “improbably broad reach” would encompass “everything from the detergent under the kitchen sink to the stain remover in the laundry room” to “a few drops of vinegar” in a goldfish tank, substances that “no one would ordinarily describe . . . as ‘chemical weapons.’” *Id.* at 2090–91.

Holding that the ambiguity should be resolved by reference to “basic principles of federalism,” the Supreme Court considered the “natural meaning of ‘chemical weapon,’” which “takes account of both the particular chemicals that the defendant used and the circumstances in which she used them.” *Id.* at 2090. Following this approach, the Court concluded that “the chemicals in this case,” “[w]hen used in the manner” at issue, “are not of the sort that an ordinary person would associate with instruments of chemical warfare.” *Id.* First, they bore “little resemblance to the deadly toxins” that were the focus of the statute’s animating treaty. *Id.* Furthermore, the Court observed that “the use of something as a ‘weapon’ typically connotes ‘[a]n instrument of offensive or defensive combat,’” and “no speaker in natural parlance would describe Bond’s feud-driven act of spreading irritating chemicals on [a] door knob and mailbox as ‘combat.’” *Id.* (quoting Webster’s Third New International Dictionary 2589 (2002)). Accordingly, the Court concluded that the Chemical Weapons Act could not be construed to signal Congress’s intent to reach Bond’s purely local assault crime.

In so ruling, the Court was careful to note that an “exceptional convergence of factors” compelled its decision. *Id.* at 2093. It cautioned that “nothing” in *Bond* should be read to “disrupt” federal authority to enforce federal criminal laws “against assassination, terrorism, [or] acts with the potential to cause mass suffering.” *Id.* at 2092. Such criminal activity had “not traditionally been left predominantly to the States” so as to raise federalism concerns about Congress’s intended reach. *Id.*

2. Le Does Not Stand Convicted of Purely Local Conduct so as To Require Construction of the Biological Weapons Act According to Principles of Federalism

Le argues that the statutory definition of a “biological . . . toxin . . . for use as a weapon” (“biological weapon”) in the Biological Weapons Act, like the statutory definition of a “chemical weapon” in the Chemical Weapons Act, is so broad that it can reach purely local criminal conduct. Thus, he maintains that here, as in *Bond*, federalism requires a clear statutory indication that Congress meant federal law to reach such conduct before it can be so applied. Because there is no such indication in the Biological Weapons Act, Le submits that his federal conviction cannot stand.

The argument fails at the first step of analysis. Even if the statutory definition of “biological weapon” might be construed to reach a purely local crime in some cases, thereby raising federalism concerns akin to those in *Bond*, Le’s conduct was no local crime. Le argues that his conduct only facilitated common law murder. But that does not aptly characterize the conduct for which he stands convicted. What Le did to violate the Biological Weapons Act was to use the internet, routinely recognized by this court as an instrumentality of interstate commerce, *see United States v. Konn*, 634 F. App’x 818, 821 (2d Cir. 2015) (summary order); *United States v. Anson*, 304 F. App’x 1, 5 (2d Cir. 2008) (summary order) (collecting cases from sister circuits), to locate, negotiate for, and purchase ricin on the black market. Then, when he had done so, Le fraudulently used another interstate

instrumentality, the United States Postal Service, as the means to receive the lethal toxin.

Maintaining the integrity of the Postal Service is certainly a “matter of particular federal concern.” *Smith v. United States*, 431 U.S. 291, 304 n.10 (1977). The Constitution itself grants Congress the power to enact all laws it deems necessary and proper to execute its power to establish post offices, a power that extends to criminal regulations. See U.S. Const. art. I, § 8, cl. 7 & 18; *U.S. Postal Service v. Brennan*, 574 F.2d 712, 714 (2d Cir. 1978); see also *United States v. Pannell*, 321 F. App’x 51, 53–54 (2d Cir. 2009) (summary order) (“Congress’s postal power carri[e]s with it the ability to impose criminal penalties to protect federal interests advanced by that power.” (quoting *United States v. Lipscomb*, 299 F.3d 303, 324 (5th Cir. 2002))). The “nationwide character of the postal system argues in favor of . . . national[] uniform[ity]” in its regulation, *Smith v. United States*, 431 U.S. at 304 n.10, so as to warrant some “limits [to] state regulatory power in relation to the federal mail service,” *Roth v. United States*, 354 U.S. 476, 494 (1957) (internal quotation marks omitted). Thus, Le’s attempted acquisition of ricin through the fraudulent use of the Postal Service is no purely local crime.

Regulating the instrumentalities of interstate commerce is also a matter of strong federal interest, see *United States v. Lopez*, 514 U.S. 549, 558 (1995) (identifying “instrumentalities of interstate commerce” as one of three “broad” categories of activity subject to federal regulation), one not traditionally left principally to the States, see *United Haulers Ass’n v. Oneida-Herkimer Solid Waste Mgmt. Auth.*,

550 U.S. 330, 338 (2007) (explaining that courts have long interpreted Commerce Clause as “implicit restraint on state authority, even in the absence of a conflicting federal statute”). The conclusion applies with particular force to the internet. *See United States v. Hornaday*, 392 F.3d 1306, 1311 (11th Cir. 2004) (recognizing federal government’s authority to prohibit harmful internet activity even having “primarily intrastate impact”⁵). As this court has observed the internet “does not recognize geographic boundaries,” thus, a state cannot easily regulate its activities “without projecting its legislation into other States,” raising constitutional concerns under the dormant Commerce Clause. *American Booksellers Found. v. Dean*, 342 F.3d 96, 103 (2d Cir. 2003) (brackets and internal quotation marks omitted). This is not to suggest that state laws can never apply to internet transactions. *See SPGGC, LLC v. Blumenthal*, 505 F.3d 183, 195 (2d Cir. 2007) (rejecting dormant Commerce Clause challenge to state consumer protection law where vendor had near-perfect means of distinguishing between online consumers who resided within state and those who did not). It is simply to recognize that crimes conducted over the internet—such as Le’s attempt to acquire ricin on the Dark Net—cannot reasonably be viewed as purely local matters.⁶

Le’s observation that the *Bond* defendant also acquired proscribed materials on the internet and through the mail, *see Bond v.*

⁵ It is by no means evident that the impact of Le’s ricin trafficking would be intrastate. Le testified that the clients for his reshipping services are in China.

⁶ Insofar as Le argues that Congress exceeded its Commerce Clause authority in enacting the Biological Weapons Act, we explain in Section I.D, *infra*, why that argument fails on the merits.

United States, 134 S. Ct. at 2085, warrants no different conclusion. The *Bond* defendant was not convicted for *acquisition*, as Le is here, but only for *possession* and *use* of such materials. There is an undoubted federal interest in the use of interstate instrumentalities to acquire the means to commit murder, even if the murder itself is purely local.

Thus, Le's acquisition of ricin through instrumentalities of interstate commerce is not akin to the purely local assault in *Bond* and presents no need for us to construe the Biological Weapons Act according to principles of federalism.

3. Le's Conduct Falls Within the Biological Weapons Act Even When Construed According to Principles of Federalism

In any event, applying federalism principles of construction to the Biological Weapons Act affords Le no relief from conviction. Application of such principles in *Bond* resulted in the Supreme Court construing the term "chemical weapon" according to its "natural meaning" rather than its "improbably broad . . . statutory definition." *Bond v. United States*, 134 S. Ct. at 2090. *Bond* identified the natural meaning of "chemical weapon" by reference to two factors: (1) the type of chemicals in the case, and (2) the circumstances in which the defendant used them. *See id.* It concluded that neither factor reached the conduct at issue in that case. No such conclusion is warranted here.

The type of biological toxin at issue, ricin, is "extremely deadly," *United States v. Baker*, 98 F.3d 330, 333 (8th Cir. 1996), even in

extremely small doses, *see* Trial Tr. at 130–31 (defining lethal dose of ricin as three to five micrograms per kilogram of body weight when inhaled or injected, and twenty milligrams per kilogram of body weight when ingested); *see also* *United States v. Leahy*, 169 F.3d 433, 436 (7th Cir. 1999) (explaining defendant’s possession of 0.67 grams of ricin was enough to kill approximately 125 people).⁷ Ricin’s deadliness is compounded, moreover, by the fact that it has no known antidote. This contrasts sharply with the chemicals in *Bond*, which were more likely to be irritating than lethal, and whose harmfulness could be mitigated by rinsing with water. *See Bond v. United States*, 134 S. Ct. at 2085 (observing that chemicals at issue were “potentially lethal” in “high enough doses”). Further, while the *Bond* chemicals bore “little resemblance to the deadly toxins” that are the focus of the Chemical Weapons Convention, *id.* at 2090, ricin is listed in Schedule 1 of the Convention’s Annex on Chemicals as a “high risk” substance, *see* Chemical Weapons Convention, Annex on Chemicals, 1974 U.N.T.S. at 355–58. Also, the Secretary of Health and Human Services has designated ricin as a “select . . . toxin” having “the potential to pose a severe threat to public health and safety,” which means that its possession or use for *any* purpose is strictly regulated. 42 C.F.R. § 73.3; *see, e.g., id.* §§ 73.7–73.19 (requiring persons seeking to possess, use, or transfer any select toxin, *inter alia*, to submit to governmental risk assessment, to obtain certificate of registration from agency, to

⁷ A microgram equals one millionth of a gram; a milligram equals one thousandth of a gram.

develop for agency approval written security plan for safeguarding toxin, and to submit to unannounced inspections).

Thus, we can confidently conclude that *Bond's* hypothetical “educated user of English,” *Bond v. United States*, 134 S. Ct. at 2090, would describe ricin as the type of toxin normally understood as a “biological weapon” and, thus, subject to federal law.⁸

In urging otherwise, Le observes that at the second, use step of the analysis, *Bond* recognized a “weapon” to “connote[] [a]n instrument of offensive or defensive combat.” *Id.* (internal quotation marks omitted). He argues that nothing in the circumstances of his case indicates that he attempted to acquire ricin for combat use. Rather, his attempted acquisition was to facilitate a single client’s murder of a single person. The argument is unpersuasive for several reasons.

First, we do not understand *Bond* to hold that *each* of the two factors—type and use—properly considered in identifying the natural meaning of a chemical (or biological) weapon must equally belie a purely local interest. Rather, the factors are properly considered together to determine if, on balance, the substance in question is naturally understood as a chemical (or biological) weapon. Where, as here, the type of toxin at issue is particularly deadly, serves no other purpose than to kill, and “pose[s] a severe threat to public

⁸ The conclusion finds further support in the fact that ricin is undetectable on autopsy. This allows the toxin to kill while frustrating local law enforcement efforts even to detect that a crime has been committed, let alone to prosecute its perpetration. This heightens the federal interest in controlling the toxin’s acquisition.

health and safety,” 42 C.F.R. § 73.3, the first *Bond* factor may, by itself, carry sufficient weight to have ricin fall within the natural meaning of a biological weapon, see *Bond v. United States*, 134 S. Ct. at 2092 (citing, with seeming approval, Chemical Weapons Act prosecutions for “possession of extremely dangerous substances with the potential to cause severe harm to many people”).⁹

Second, and in any event, the record does not support Le’s narrow characterization of his conduct as limited to supplying a single customer targeting a single victim. In his Dark Net exchanges, Le stated that he had “buyers lining up” for ricin and expected “simple and easy [ricin] death pills” to become “best sellers.” Trial Tr. at 55, 67. Thus, the circumstances of acquisition in this case are reasonably understood not as an attempt to facilitate a single murder, but as the first step in establishing a ricin distribution network to sell “death itself.” *Id.* at 67–68. Far from being a purely local matter, such conduct falls well within the “core concerns” of the treaty informing the Biological Weapons Act. See Biological Weapons Convention, *supra*, 1015 U.N.T.S. at 164–67 (prohibiting “development, production, stockpiling, [or] acquisition”—*i.e.*, proliferation—of biological toxins within and between states).

Third, *Bond* does not hold that federalism limits the natural meaning of “weapon” to a combat instrument. *Bond* observed that

⁹ A strong showing at the second, use step of analysis may also suffice to recognize that a not-necessarily-deadly substance is naturally understood as a chemical (or biological) weapon in the context employed. See *Bond v. United States*, 134 S. Ct. at 2091 (recognizing that, if chemicals at issue in *Bond* were used to poison water supply, Chemical Weapons Act might well apply).

the use of something as a weapon “typically” carries that connotation, *Bond v. United States*, 134 S. Ct. at 2090 (emphasis added), but it did not foreclose consideration of other natural meanings of the word in light of the circumstances. For example, “weapon” is also generally understood to signify an instrument “designed to be used to injure or kill someone.” Black’s Law Dictionary 1730–31 (9th ed. 2009). Thus, because a gun is designed to kill, an educated user of English would describe it as a “weapon” without regard to whether its use involved “combat.” See Webster’s Third New International Dictionary 452 (2002) (defining “combat” as “fight, encounter, or contest between individuals or groups”; “fighting engagement of military forces”). The chemicals in *Bond* were not “weapons” in the sense of either of these natural meanings. The *Bond* defendant’s placement of chemicals on a door knob or mailbox in the hope of inducing a rash would hardly be described as “combat.” See *Bond v. United States*, 134 S. Ct. at 2090. Nor were the chemicals “designed” to kill; that they could do so in other circumstances was more coincidental than a matter of design. That is not the case with ricin. Its singular purpose is to kill. And that was certainly the use Le intended for it in the circumstances here. See Trial Tr. at 67–68 (stating “it is death itself we’re selling here”; “simple and easy death pills”). Thus, we conclude that the same hypothetical person who would not describe the conduct in *Bond* as the use of a “chemical weapon” would describe Le’s conduct as the attempted acquisition of a “biological weapon.”

Fourth, even if federalism principles of construction required the terms “chemical weapon” and “biological weapon” to connote a

combat instrument, *Bond* itself signals that the term “combat” is not to be construed so narrowly as to exclude “assassination, terrorism, and acts with the potential to cause mass suffering.” *Bond v. United States*, 134 S. Ct. at 2092. Such acts are as likely (1) to be carried out by individuals (the proverbial “lone wolf” or self-radicalized terrorist) as by armies, (2) to target innocent civilians as uniformed combatants, and (3) to be effected clandestinely as in direct encounters. Le asserts that nothing in the circumstances of his case indicates that he contemplated selling ricin to buyers intent on such acts. What the record shows, however, is Le’s indifference to his buyers’ purposes. His singular focus was on developing a foolproof method to commit murder with ricin that he could sell to any interested buyer. See Trial Tr. at 55, 67–68, 74, 83. Precisely because the nature of ricin—deadly in even small quantities, lacking any antidote, undetectable on autopsy—makes it ideally suited for assassination and terrorism,¹⁰ Le would have to know that among the

¹⁰ In 1978, a Bulgarian dissident was assassinated in London by an assailant using an umbrella tip to inject him with ricin. See Dana A. Shea & Frank Gottron, Congressional Research Service, *Ricin: Technical Background and Potential Role in Terrorism*, CRS No. 21383, at 3 (Apr. 17, 2013). In 1994, anti-government militia members in Minnesota were convicted under the Biological Weapons Act of possessing ricin, which they intended to use to assassinate local and federal law enforcement officials. See Jeanne Guillemin, *Biological Weapons: From the Invention of State-Sponsored Programs to Contemporary Bioterrorism* 158 (2005). Letters containing ricin have been mailed to various government officials, including Presidents George W. Bush and Barack Obama. See Shea & Gottron, *supra*, at 3; Lisa B. McDermott, Reuters, “Texas Actress Sentenced to 18 Years for Ricin-Laced Letter to Obama” (July 16, 2014), available at <https://www.reuters.com/article/us-usa-crime-ricin/texas-actress-sentenced-to-18-years-for-ricin-laced-letter-to-obama-idUSKBN0FL2AI20140716>; Therese Apel, Reuters, “Mississippi Man Gets 25 Years for Sending Ricin Letter to Obama” (May 19, 2014), available at <https://www.reuters.com/article/us-usa-ricin-mississippi/mississippi-man-gets-25-years-for-sending-ricin-letter-to-obama-idUSBREA4>

buyers “lining up” for his “simple and easy death pills” would be persons with such purposes. *Id.* at 55, 67. In short, any professed ignorance would have to be deemed willful. *See United States v. Fofanah*, 765 F.3d 141, 144–45 (2d Cir. 2014) (explaining that conscious avoidance doctrine permits jury to find defendant “had culpable knowledge of a fact” where evidence shows he “was aware of a high probability of the fact . . . and consciously avoided confirming” it); *see also United States v. Nektalov*, 461 F.3d 309, 315 (2d Cir. 2006) (“[D]efendant’s affirmative efforts to ‘see no evil’ and ‘hear no evil’ do not somehow magically invest him with the ability to ‘do no evil.’” (internal quotation marks omitted)).

In sum, Le cannot show any federalism error, let alone plain error, that requires vacatur of his conviction. His conduct—attempting to acquire ricin over the internet and using a false identity to have the Postal Service deliver the toxin to him—manifests no purely local crime as in *Bond v. United States*, but conduct of primarily federal concern. In any event, when we consider the type of biological toxin here at issue, together with the circumstances under which Le proposed to acquire and then distribute it, we conclude that Le’s conduct falls comfortably not only within the statutory definition of a “biological . . . toxin . . . for use as a weapon,” 18 U.S.C. § 175(a), but also within the natural meaning of those words, thus raising no

IOQE20140519. International authorities have also foiled terrorist plots to develop and use ricin. *See* David Brennan, Newsweek, “Jihadist Made Ricin with Web-Bought Castor Bean Seeds, Police Say,” (June 14, 2018), *available at* <https://www.newsweek.com/jihadist-made-ricin-web-bought-castor-bean-seeds-police-say-977244>; Alan Blinder, N.Y. Times, “Two in Ricin Terrorism Plot Are Each Sentenced to 10 Years in Prison” (Nov. 14, 2014), *available at* <https://www.nytimes.com/2014/11/15/us/ricin-terrorism-plot-sentencing.html>.

federalism concerns that preclude application of the Biological Weapons Act to his case.

D. Constitutional Challenge

Le argues that, even if his conduct falls within the criminal provision of the Biological Weapons Act, *see id.*, his conviction must be vacated because Congress lacked constitutional authority to enact such legislation, *see National Fed'n of Indep. Bus. v. Sebelius*, 567 U.S. 519, 534–35 (2012) (explaining federal government “can exercise only the powers granted to it” by Constitution (internal quotation marks omitted)). Le contends that the Commerce Clause, *see* U.S. Const. art. I, § 8, cl. 3, cannot provide the necessary authority because § 175(a) “has nothing to do with commerce or economic enterprise,” Appellant Br. at 25.¹¹ In any event, he submits that the statute could

¹¹ As Le observes, at one point in *Bond*, the government “explicitly disavowed” the Commerce Clause as a source of congressional authority for enactment of the Chemical Weapons Act, 18 U.S.C. § 227 *et seq.*, instead defending the statute under the Treaty Clause, *see* U.S. Const. art. II, § 2, cl. 2, an argument not reached by the Supreme Court, *see Bond v. United States*, 134 S. Ct. at 2086–87. We do not understand that disavowal, taken with respect to a different statute and not relied upon by the Supreme Court in finally resolving the case, to preclude the government’s reliance on the Commerce Clause here. *See Reed Elsevier, Inc. v. Muchnick*, 559 U.S. 154, 170 (2010) (explaining judicial estoppel typically applies where “party has succeeded in persuading a court to accept [its] earlier position” (internal quotation marks omitted)); *DeRosa v. Nat’l Envelope Corp.*, 595 F.3d 99, 103 (2d Cir. 2010) (explaining judicial estoppel requires showing (1) party’s position is “clearly inconsistent” with its earlier position, (2) former position “has been adopted in some way” in prior court proceeding, and (3) party asserting two positions derives “unfair advantage against the party seeking estoppel” (internal quotation marks omitted)); *see generally National Fed’n of Indep. Bus. v. Sebelius*, 567 U.S. at 588 (recognizing statute as constitutional exercise of Congress’s taxing authority despite government disavowal that statute imposed tax). For reasons explained herein, we conclude that the Commerce Clause supports both § 175’s enactment and its application to Le’s case, and, thus, we need not

not constitutionally be applied to him in the absence of a nexus finding between his conduct and interstate commerce, which the jury was not required to make in his case. These arguments, whether styled as facial or as-applied challenges, fail on the merits.¹²

The Supreme Court has construed the Commerce Clause to authorize Congress's regulation of three categories of activity: (1) "the use of the channels of interstate commerce"; (2) "the instrumentalities of interstate commerce, or persons or things in interstate commerce"; and (3) "those activities that substantially affect interstate commerce." *Taylor v. United States*, 136 S. Ct. 2074, 2079 (2016) (internal quotation marks omitted).¹³ The third authority defeats Le's constitutional challenge to § 175(a). Pursuant thereto,

consider whether other constitutional provisions, such as the Treaty Clause and the Necessary and Proper Clause, *see* U.S. Const. art. I, § 8, cl. 18; art. II, § 2, cl. 2, also do so, *see United States v. Morrison*, 529 U.S. 598, 607 (2000) (explaining that statute "must be based on one or more of [Congress's] powers enumerated in the Constitution" to withstand challenge to its enactment); *see also National Fed'n of Indep. Bus. v. Sebelius*, 567 U.S. at 535.

¹² Facial challenges are "generally disfavored," *Dickerson v. Napolitano*, 604 F.3d 732, 741 (2d Cir. 2010), and "the most difficult . . . to mount successfully" because they require the challenger to "establish that no set of circumstances exists under which the Act would be valid," *United States v. Salerno*, 481 U.S. 739, 745 (1987); *accord New York State Rifle & Pistol Ass'n v. Cuomo*, 804 F.3d 242, 265 (2d Cir. 2015). "If a court concludes that a statute was constitutionally applied to a facial challenger, then it generally need not consider the statute's applicability in other situations." *Copeland v. Vance*, 893 F.3d 101, 111 (2d Cir. 2018); *see United States v. Decastro*, 682 F.3d 160, 163 (2d Cir. 2012) (explaining that defendant who fails to demonstrate that challenged law is unconstitutional as applied to him "necessarily" fails to state facial challenge (internal quotation marks omitted)).

¹³ While acknowledging precedent permitting regulation of all three categories of activity under the Commerce Clause, Justice Scalia thought that Congress's power over the third category derived from the Necessary and Proper Clause. *See Gonzales v. Raich*, 545 U.S. 1, 34–35 (2005) (Scalia, *J.*, concurring in the judgment) ("Where necessary to make a regulation of interstate commerce effective, Congress may regulate even those intrastate activities that do not themselves substantially affect interstate commerce.").

Congress may regulate even “purely local activities that are part of an economic class of activities that have a substantial effect on interstate commerce.” *Id.* at 2080 (internal quotation marks omitted). The regulated activities must be “economic in nature” and “substantially affect interstate commerce in the aggregate, even if their individual impact on interstate commerce is minimal.” *Id.* at 2079–80 (internal quotation marks omitted).

Le argues that the activities regulated by § 175(a)—the development, production, stockpiling, transfer, acquisition, retention, or possession of biological weapons—are not inherently economic in nature. In support, he cites *United States v. Morrison*, 529 U.S. 598, 617–18 (2000) (holding that statute proscribing violence against women exceeded Congress’s Commerce Clause authority because it did not regulate economic activity), and *United States v. Lopez*, 514 U.S. at 561 (holding that statutory prohibition on possession of gun in school zone “by its terms has nothing to do with ‘commerce’ or any sort of economic enterprise” and “is not an essential part of a larger regulation of economic activity”). The argument is defeated by *Gonzales v. Raich*, 545 U.S. 1 (2005).

There, the Supreme Court rejected a constitutional challenge to the Controlled Substances Act (“CSA”), *see* 21 U.S.C. § 801 *et seq.*, as applied to “intrastate, noncommercial cultivation and possession of [marijuana] for personal medical purposes,” *Gonzales v. Raich*, 545 U.S. at 8, 13 (internal quotation marks omitted). Distinguishing the CSA from the statutes at issue in *Morrison* and *Lopez*, the Court observed that the activities regulated by the CSA—the manufacture,

distribution, and possession of drugs—“are quintessentially economic” and, thus, within Congress’s Commerce Clause authority to regulate. *Id.* at 25–26 (observing that “[e]conomics’ refers to ‘the production, distribution, and consumption of commodities’” (quoting Webster’s Third New International Dictionary 720 (1966))). The intrastate and noncommercial nature of the challengers’ activities warranted no different conclusion, the Court explained, because “[p]rohibiting the intrastate possession or manufacture of an article of commerce is a rational (and commonly utilized) means of regulating commerce in that product.” *Id.* at 26. In making this point, the Supreme Court cited various federal statutes doing just that. *See id.* at 26 n.36. Notable here is the Court’s citation to 18 U.S.C. § 175(a), the Biological Weapons Act provision that Le presently challenges. *See id.*

As this citation indicates, and as we here conclude, § 175(a), like the CSA, regulates quintessentially economic activity: the development, production, stockpiling, transfer, acquisition, and retention of biological toxins, fungible commodities for which an interstate market exists. *See id.* at 25–26. That the provision regulates “an unlawful market . . . is of no constitutional import,” as it is well-settled that Congress has the “power to *prohibit* commerce in a particular commodity.” *Id.* at 19 n.29 (emphasis added). Accordingly, § 175(a) plainly falls within Congress’s Commerce Clause authority, thus defeating Le’s facial challenge to the statute. *See id.* at 26 (holding that because CSA “directly regulates economic, commercial activity, . . . *Morrison* casts no doubt on its constitutionality”).

The same conclusion obtains for Le's as-applied challenge because the conduct supporting his conviction was undeniably commercial. The object of his actions was to buy ricin on the black market in order to sell it to clients "lining up" for the toxic commodity. Trial Tr. at 55, 67–68. Toward this commercial end, Le knowingly employed an instrumentality of interstate commerce, the internet, first, to locate a ricin supplier and, then, to order and pay for the toxin. Also, he arranged for his ricin order to be delivered to him through another instrumentality of interstate commerce, the United States Postal Service. These activities, informing both the supply and demand sides of the market for biological toxins, are plainly within Congress's Commerce Clause authority to proscribe. See *Gonzales v. Raich*, 545 U.S. at 26, 31.

In urging otherwise, Le faults Congress for enacting § 175(a) without particularized legislative findings of a relationship between biological weapons and interstate commerce. While such findings can sometimes be "helpful," their "absence" does not necessarily "call into question Congress' authority to legislate." *Id.* at 21. The conclusion is particularly apt here where, as in *Raich*, the relationship between proscribed trafficking in a dangerous commodity and commerce is evident.

Nor is a different conclusion warranted by the fact that the jury was not asked to make a nexus finding between Le's conduct and interstate commerce. Were such proof required, the trial record overwhelmingly provides it, as we have just detailed. See *Neder v. United States*, 527 U.S. 1, 9–10 (1999) (ruling that omission of element

is subject to harmless error review); *see also United States v. Agrawal*, 726 F.3d 235, 257 (2d Cir. 2013) (holding omission of element harmless where proved by overwhelming evidence). In any event, the law does not require the government to make a nexus showing in every prosecution. *See United States v. Ramos*, 685 F.3d 120, 134 (2d Cir. 2012); *United States v. Holston*, 343 F.3d 83, 91 (2d Cir. 2003). Rather, the requisite nexus is “determined by the class of activities regulated by the statute as a whole, not by the simple act for which an individual defendant is convicted.” *United States v. Holston*, 343 F.3d at 90–91 (quoting *Proyect v. United States*, 101 F.3d 11, 13 (2d Cir. 1996)). As we have already concluded, § 175(a) regulates a “class of activities” affecting interstate commerce and, thus, within the reach of Congress’s Commerce Clause power.

Accordingly, because Congress’s enactment of § 175(a) fell within its Commerce Clause authority, Le’s constitutional challenge to that statute, both facial and as-applied, fails, warranting no relief from conviction.

II. Ineffective Assistance of Counsel

While Le’s appeal was being pursued by his trial counsel, and prior to the appointment of current appellate counsel, Le filed a *pro se* brief with this court arguing that (1) counsel had provided constitutionally ineffective assistance at trial, and (2) both the district court and this court erred in allowing trial counsel to represent Le on appeal. With trial counsel now relieved and new appellate counsel appointed, it is not clear if Le is pursuing his ineffectiveness claim on

direct appeal. In a supplemental *pro se* brief, he states that he “has not, as of yet, asked this Court to hear this issue.” Dkt. No. 154 at 4.

We need not ask Le to clarify his position because his quoted statement appears to recognize our “general[] disinclin[ation] to resolve ineffective assistance claims on direct review.” *United States v. Gaskin*, 364 F.3d 438, 467 (2d Cir. 2004). Such claims are more appropriately raised in the first instance through a habeas corpus petition to the district court, which is “best suited to developing the facts necessary to determining the adequacy of representation during an entire trial.” *Massaro v. United States*, 538 U.S. 500, 505 (2003). Accordingly, we do not review Le’s ineffective assistance claim on this appeal, leaving Le to pursue it, if he wishes, in a timely habeas corpus petition.

CONCLUSION

To summarize, we conclude as follows:

1. Le’s federalism challenge to his conviction fails because
 - (a) the conduct for which he stands convicted under 18 U.S.C. § 175(a), the attempted acquisition of a biological toxin over the internet and through the mails, by contrast to the simple assault conduct in *Bond v. United States*, 134 S. Ct. 2077 (2014), on which he relies, is no purely local crime, and, therefore, federalism principles of construction need not be applied to narrow § 175(a)’s reach; and

(b) even when the federalism principles of construction identified in *Bond* are applied here, Le's conduct warrants federal prosecution because of the deadly type of toxin he sought to acquire, the particular suitability of that toxin for assassination and terror, and Le's indifference to its use.

2. Le's constitutional challenge to his conviction fails because the Commerce Clause authorizes both Congress's enactment of 18 U.S.C. § 175(a) and the application of that statute to Le's conduct.

3. We do not review Le's claim of ineffective assistance of trial counsel on this direct appeal; any such claim is properly pursued in the first instance through a habeas corpus proceeding.

Accordingly, the judgment of conviction is **AFFIRMED**.