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Chrysippus of Cnidus: Medical Doxography and Hellenistic Monarchies

Marquis Berrey

University of Iowa
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After Hippocrates, Diocles of Carystus, then Praxagoras and Chrysippus, then Herophilus and Erasistratus so practiced this art that they progressed further into various paths of healing.

Celsus’ Introduction to De Medicina (praef. 8) picks out those physicians who made important and substantial medical contributions in the transition from medicine’s Asclepiad origin to the medical philosophies of the Hellenistic medical sects. He sketches the history of medical therapeutics from the fifth through the early third century BCE. All these physicians are well known to scholars with the exception of Chrysippus. Here Chrysippus appears with Praxagoras in conjunction with their most famous students, Erasistratus and Herophilus respectively. At least for such a doxographically prominent physician, Chrysippus is rarely cited by later physicians. Chrysippus alone of the physicians in Celsus’ list has not been the subject of an academic monograph; in fact, no one has attempted to make a complete collection of fragments and testimonia. The chief impediment to this goal has been the difficulty of distinguishing between the doctors Chrysippi. The surest criterion for a starting point is Chrysippus’ association with his more famous student, Erasistratus. While our sources are uneven and definitive conclusions elusive, this paper offers progress toward a collection of fragments and testimonia for the doctor Chrysippus, teacher of Erasistratus. I list 31 testimonia and no fragments for Chrysippus at the end of the paper.
The question of how many doctors Chrysippi there were has bedeviled scholarship. I argue that there were five: (1) Chrysippus of Cnidus son of Erineos (RE 15); (2) Chrysippus of Cnidus son of Aristagoras (RE 16), whom I identify as the teacher of Erasistratus; (3) Chrysippus son of Chrysippus son of Aristagoras (RE 17), whom I shall call “Chrysippus filius”; (4) Chrysippus student of Erasistratus (RE 18 and 20), whom I shall call “Chrysippus discipulus”; and (5) Chrysippus follower of Asclepiades of Bithynia (RE 19). Since Chrysippus the follower of Asclepiades is chronologically distant from the other four, this paper will not deal with him further.

Diogenes Laertius 8.89 is the most important testimonium about the identity of Chrysippus, teacher of Erasistratus. It is also the most significant passage about Chrysippus that does not mention Erasistratus. Diogenes clearly distinguishes between two different doctors Chrysippi:

τούτου [sc. Εὐδόξου] διήκουσε Χρύσιππος <ὁ> Ἐρίνεω Κνίδιος τὰ τὲ περὶ θεῶν καὶ κόσμου καὶ τῶν μετεωρολογουμένων, τὰ δ’ ιατρικά παρὰ Φιλιστίωνος τοῦ Σικελιώτου. κατέληε δὲ καὶ ύπομήματα κάλλιστα. τούτου γέγονε παῖς Ἀρισταγόρας, οὗ Χρύσιππος Αεθλίου μαθητής, οὗ τὰ θεραπεύματα φέρεται ὀρατικά, τῶν φυσικῶν θεωρημάτων ὑπὸ τὴν διάνοιαν αὐτοῦ πεσόντων.2


2 Citations of Diogenes are taken from T. Dorandi, Diogenes Laertius (Cambridge 2013). In this passage however I have written Χρύσιππος <ὁ> Ἐρίνεω (Χρύσιππος †Ερίνεω† Dorandi). This Chrysippus should be understood at least as the son of a man whose name began with Ep-. For while Dorandi excludes Cobet’s conjecture <ὁ> and daggers Ερίνεω (the name transmitted by two of the three older manuscripts), the patronymic receives support from Χρίσσιππος ευξις in Laurentianus 73.1 143’ col. 2 line 1, a tabular listing of famous doctors following the text of Celsus’ De Medicina. M.
Chrysippus of Cnidus, son of Erineos, was Eudoxus’ student in divine matters, the cosmos, and astronomical matters, and was Philiston of Sicily’s student in medical matters. Chrysippus left behind especially beautiful tracts. Chrysippus’ son was Aristagoras, whose son Chrysippus was a student of Aethlius; “Treatments for Sight” are said to be Chrysippus’, since natural theory fell under his consideration.

The two Chrysippi here were both well-known doctors but lived at different times. Chronologically Chrysippus son of Erineos, who was a comrade of Eudoxus († ca. 340) in his travels to Egypt (Diog. Laert. 8.87), would have been too old to be the teacher of Erasistratus (ca. 310–240). Erasistratus’ teacher needs to have been active in the last part of the fourth century and the beginning of the third. This date accords with the activity of Diogenes’ second Chrysippus, the son of Aristagoras. Chrysippus son of Aristagoras lived two generations after the *flourit* of Eudoxus and Chrysippus son of Erineos. Furthermore, Chrysippus son of Aristagoras had remained famous as a physician as shown by Diogenes’ reference to his work. The majority opinion of scholarship has thus understood the second Chrysippus, the son of Aristagoras, to be the teacher of Erasistratus.³

To continue disentangling the doctors Chrysippi we must consult Diogenes Laertius 7.186. This testimonium does men-

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³ Wellmann, “Zur Geschichte der Medicin im Alterthum,” *Hermes* 35 (1900) 369, emended *Chrisippus erui* to *Chrysippus Erini* to agree with Diogenes’ text. So far as I know, no editor of Diogenes has used the supporting evidence of *Laurentianus* 73.1 to defend the name of Chrysippus’ father transmitted in Diogenes. I will continue to call him Chrysippus son of Erineos for simplicity’s sake.

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*Wellmann, RE* 3 (1899) 2510, Garofalo, *Erasistrati fragmenta* 21, and Keyser, *EANS* 475, agree that the second Chrysippus is Erasistratus’ teacher. Wellmann changed his mind again and again in later articles; Fraser, *RendIstLomb* 103 (1969) 523–530, is a helpful guide to sorting out Wellmann’s various theses. I cannot agree with Fraser (523–527) that Chrysippus son of Erineos is likely to have been Erasistratus’ teacher, especially as Fraser ignores Aristagoras (the intermediary generation) in his schema.

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Erasistratus in a list of three other doctors Chrysippus after
discussion of the homonymous Stoic philosopher Chrysippus of
Soli:

There was a different Chrysippus, of Cnidus, a doctor, by whom
Erasistratus says that he was much benefited. And there was a
second [Chrysippus] son of this Chrysippus, a doctor to Pto-
lemmy, who under suspicion was arrested and punished by being
whipped. Another [Chrysippus], student of Erasistratus, was also
the one who wrote *Georgics*.

The first two in Diogenes’ list are the teacher of Erasistratus,
Chrysippus of Cnidus son of Aristagoras, and his son, Chrysippus
filius. Gorteman identifies Chrysippus filius, doctor of a
Ptolemy, with the Chrysippus put to death in the conspiracy of
Arsinoe I against Ptolemy Philadelphus known from a scholium
to Theocritus. The conspiracy of Arsinoe I is dated to 279
BCE, the right time for a fellow medical student of Erasistratus
to flourish and perish. So Chrysippus filius was a court
physician to Ptolemy Philadelphus and punished in the con-
spicacy of Arsinoe I. Texts diverge on the fate of Chrysippus
filius: he was executed according to the Theocritus scholiast but
whipped according to Diogenes Laertius.

After these two father and son doctors Chrysippi Diogenes
then continues to the third doctor Chrysippus discipulus:

4 Schol. Theocr. 17.128: “But after discovering that she [Arsinoe
daughter of Lysimachus] was plotting against him and with her the
doctors Amyntas and Chrysippus, Ptolemy Philadelphus had them killed and exiled
her to Coptus of the Thebaid and married his own sister Arsinoe.” I follow
Gorteman’s reading of the manuscripts in the names of the doctors:

5 W. Huß, *Ägypten in hellenistischer Zeit* (Munich 2001) 265–266.

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were students of Erasistratus, so ἄλλος must be modifying an understood Χρύσιππος, which then stands in apposition to μαθητής Ἐρασιστράτου. This third Chrysippus is a student of Erasistratus (presumably in medicine and thus an Erasistratean). Since Chrysippus discipulus was a student of Erasistratus, he cannot be dated any more specifically than in relation to Erasistratus’ dates of activity. It is possible to understand the title Georgics (or if not capitalized, as a genre) to refer to either a poetic composition or a prose work: if poetry, the combination of his medical knowledge and poetic interests parallel the contemporary doctors Nicias of Miletus and Numenius of Heracleia; if prose, the treatise likely contained information about the pharmacology of plants useful for medicine.

If these testimonia have been correctly attributed, Chrysippus of Cnidus son of Aristagoras (hereafter ‘Chrysippus’) thus flourished two generations after Chrysippus son of Erineos and before Erasistratus, namely ca. 320–280. Chrysippus was the son of Aristagoras, who was the son of Chrysippus son of Erineos, a companion of Eudoxus of Cnidus († ca. 340). Perhaps Chrysippus son of Erineos trained his son Aristagoras as a physician, who in turn taught Chrysippus his medicine. Diogenes Laertius 8.89 also credits Aethlius as a teacher of Chrysippus; I will return to this point below. The toponyms suggest that Chrysippus was born and learned his medicine in Cnidus, one of the two centers of the old medical families who traced their lineage from Asclepius. Wellmann argued that, since Galen HNH XV 135–136 lists Chrysippus among famous anatomists, he must have gone to Alexandria to practice. It

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6 Wellmann, RE 3 (1899) 2511, mistakenly separates the evidence from Diog. Laert. 7.186 into two Chrysippi, no. 18 and no. 20.

7 For Nicias see C. Meliadò, EANS 576–577; he is the dedicatee of Theocr. Id. 11, 13, and 28. For Numenius see J.-M. Jacques, EANS 583; he wrote two poetic works about materia medica.

8 Wellmann, RE 3 (1899) 2510. I cite the titles of Galenic treatises as in R. J. Hankinson (ed.), The Cambridge Companion to Galen (Cambridge 2008)
suffices to refute Wellmann to note that neither Dieuches nor Praxagoras, physician-anatomists in Galen’s list, are known to have visited Alexandria.

Yet for all the traditionalism of his medical education, testimonia credit Chrysippus with two untraditional medical theories, both concerned with blood. First, Galen consistently credits him and his students with abstaining from the traditional Hippocratic therapeutic practice of phlebotomy.9 Galen at least thought that Chrysippus was the first doctor to avoid therapeutic phlebotomy.10 Perhaps the most important testimonium about Chrysippus’ views on phlebotomy comes mediated indirectly through Galen’s quotation of Erasistratus’ book Bringing-up Blood. Garofalo has reconstructed Erasistratus’ original text from three Galenic passages:

Make ties with greasy wool at the armpits and inguinal glands, not just as some people do who, in imitation of therapies that are logically consequent to nothing, do these things for the sake of blood, but [make] the ties pressing tight against the bonds. For more blood is checked in the bound parts of the body. The expansion of veins and phlebotomy make that clear. A lot of blood flows when the phlebotomized part of the body is bound. In the case of bringing-up of blood the most blood is checked in the legs and arms. When the blood becomes less in the chest, the bringing-up [of blood] will also be lighter. Doctors phlebotomizing patients bringing up blood want to accomplish this same thing too. But Chrysippus did much better by not only looking to the present but by considering the coming danger. Danger of inflammation remains in the bringing-up, since it is not easier

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10 Ven.Sect.Er. XI 151, Χρυσίππου τοῦ Κνιδίου, οὗπερ δὴ πρώτου τὸ δόγμα τούτ’ ἦν, μὴ χρῆσθαι φλεβοτομία, “Chrysippus of Cnidus, who was the first of this opinion, not to employ phlebotomy.”
[on the patient] to give food and medication but there is the risk that the patient, phlebotomized and without food for a long time, faints. Chrysippus moves existing nutriment working in the body into the pained areas at the time when there is danger of fainting [by loosing bonds?] ... When the flow changes direction, by readily using this and forcing the patient not to eat, he is utterly remarkable in thought, worthy of praise, and wholly follows his own logic.\footnote{11}

Chrysippus, Erasistratus attests, advocated abstention from food in lieu of phlebotomy. Both phlebotomy and fasting deny the fever material to feed on. But phlebotomy is risky for a patient because blood may be held in the limbs. In his treatment Chrysippus moves foodstuffs already in the body into the inflamed areas by releasing the bound limbs at the appropriate time. Since the text gives out at this point there is no explanation for the motivation of Chrysippus’ treatment, but only its effects. According to Erasistratus Chrysippus’ treatment had the same therapeutic effect as phlebotomy, while avoiding its dangers. He praises Chrysippus for his consistency and con-

trasts the phlebotomizers whose therapies have no logical reasoning. What might Chrysippus’ consistency or logic have been? Given our limited information and the multiple stages of transmission, it is hazardous to infer that Chrysippus’ motives for avoiding therapeutic phlebotomy were grounded in his student Erasistratus’ theories about paremptosis, the sudden inflammation of punctured arteries. A better explanation may lie in the relationship of Chrysippus’ practices to the earlier writings of the Hippocratic Corpus. Chrysippus seems particularly concerned with the timing of treatment in relation to the disease: kairos, the opportune moment for treatment, must be found between the present and the coming danger. Strikingly, Chrysippus seems to be following Hippocratic ideas even as he avoids the Hippocratic practice of phlebotomy.

The other striking testimonium about Chrysippus’ views also comes through Erasistratus. Marcellinus’ short text on the history of pulse theory includes a section on Chrysippus’ views:

Chrysippus interpreting by the pulse in fever declared that it became more frequent than a normal pulse. As Erasistratus says, he supposed that the criterion of frequency was a time extending for a count of four in the case of normal pulses. For when the movement of the arteries became more frequent and one or two counts are squeezed out before the count of four is reached as the artery begins again to dilate, he thought that this was a sign of fever.

For diagnostic purposes Chrysippus recognizes that the pulse is

12 See Garofalo, Erasistrati fragmenta 42–43.
13 Compare Galen Ven.Sect.Er. XI 171–172, where Chrysippus is praised for his knowledge of both kairos and metron.
14 On kairos see Hippocrates Aph. 1.1 (IV 458 Littré) and the later treatise Prec. 1.1 (IX 250); on the doctor’s understanding past, present, and future see Prog. 1 (II 110–112).
15 Marcellinus De pulsibus 9, 234–241 Schöne. I follow Garofalo’s punctuation in Erasistrati fragmenta fr.206 and translate his emendation δύο for the transmitted δεύτερον.
the normal movement of the arteries which consists of a cycle of arterial dilation and contraction (implicit here), implying that some of Herophilus’ pulse knowledge was already known when Chrysippus formulated these views.\textsuperscript{16} Chrysippus’ views on pulse are part of a series that Marcellinus puts forward to explain how the frequency of the pulse differs from speed. The first three authors in Marcellinus’ list—Chrysippus, Erasistratus, Herophilus—understood increased pulse frequency to indicate fever. According to Marcellinus Herophilus used a water-clock to measure pulse frequency by counting how many pulse beats in the arterial cycle of dilation and contraction surpassed the normal beat for an age-group.\textsuperscript{17} Chrysippus, by contrast, did not count pulse-beats or divide patients by age-groups but only measured the arterial cycle of dilation and contraction against a count of four: when the count was undercut by the frequency of the cycle, he diagnosed the patient with fever. Given the ancient stories about Erasistratus’ diagnosis of the love-sick Antiochus via the pulse, it is perhaps not surprising to find Erasistratus’ teacher Chrysippus also associated with using the pulse for diagnostic purposes.

Both these testimonia for Chrysippus appear to have been transmitted through Erasistratus. Wellmann thought that many of Erasistratus’ theories could be attributed to Chrysippus.

\textsuperscript{16} H. von Staden \textit{Herophilus: The Art of Medicine in Early Alexandria} (Cambridge 1989) 267–273, shows that Herophilus was the first to define the arterial cycle of dilation and contraction. The testimonium mentions only dilation; contraction is implicit in φθανούσης τῆς ἀρτηρίας πάλιν διαστέλλονται, “as the artery begins again to dilate.” V. Nutton, \textit{Ancient Medicine}\textsuperscript{2} (New York 2012) 272, has drawn attention to the Erasistratean Strato’s skepticism, only two generations later, that doctors could adequately distinguish veins and arteries. But Galen \textit{Hipp.Epid.VI} XVII/1 872–873 reports a similar view of Chrysippus’ diagnosis of fever by the movement of the arteries. Therefore, attributing Strato’s skepticism about the distinguishing arteries and veins back to Chrysippus cannot be sustained. Ps.-Caelius Aurelianus \textit{De responsis} 9 also states (without mentioning arteries or veins) that Chrysippus took the frequency of pulse to be a sign of fever.

\textsuperscript{17} Marcellinus 11, 254–267 Schöne = Herophilus fr.182 von Staden.

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Galen’s statement (Ven.Sect.Er.Rom. XI 197) “Why is it surprising that Erasistratus completely follows (ἕπεσθαι τὰ πάντα) Chrysippus of Cnidus?” provided evidence for this suspicion. From the testimonium about phlebotomy, for example, Welmann derived numerous speculative theories about Erasistratus’ reception of Chrysippus, Chrysippus’ relation to Praxagoras, and the history of venesection in antiquity.18 Yet much more caution than confidence is warranted. In spite of the prominence of blood in Chrysippus’ therapeutics there is no evidence that he believed that blood was not a humor, as Erasistratus did; conversely there also is no evidence that Chrysippus believed that blood was a humor.19 Further, there is no evidence in the testimonia about blood cited above or elsewhere that Chrysippus imagined the physiology of the body in mechanical ways or recognized some notion of horror vacui, as Erasistratus did.20 Now Galen (Hipp.Epid.VI XVII/1 872–873) does credit Chrysippus and Erasistratus with sharing a belief that the substance (ousia) of fever was the movement of the arteries and not its internal heat. Yet this claim looks suspiciously as if Galen is reading Erasistratus’ theories back on Chrysippus.21

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18 Welmann, Hermes 35 (1900) 374–379; on his inconsistent views see n.3 above.

19 Erasistratus apparently disavows the humors in Galen Nat.fac. II 112–114, Atibil. V 132; Hippocrates Nat.hom. confirms that blood is a humor.


21 Erasistratus’ mechanism allowed him to dispense with any theory about the body’s internal heat; cf. Garofalo, Erasistrati fragmenta 35. Further, as Garofalo (38, 136) has pointed out, Galen Diff.Puls. VIII 761 shows that the term σφυγμός for Erasistratus is always a diseased state, the febrile pulse. Yet Marcellinus De puls. 9, quoted and discussed above, shows that Chrysippus recognized pulse to be a natural movement of the body which indicated fever only under certain conditions. In this testimonium Marcellinus does not give an explanation in terms of internal heat or the ousia of the fever. He claims that Erasistratus denied that it was possible to account for the increased frequency of pulse in theoretical terms (Erasistr. fr.206). Thus the explanation that Galen gives for fever seems to correspond to other reports.
that Chrysippus treated dropsy patients with vapor baths; Erasistratus is known to have shared this therapy.\textsuperscript{22} Chrysippus elsewhere is said to have avoided strong purgatives and preferred light emetics.\textsuperscript{23} Extant evidence therefore suggests that Erasistratus directly owed to Chrysippus gentle therapeutic practices in place of violent ones.\textsuperscript{24} It is much more difficult to attribute Erasistratus’ theories—anatomical, physiological, or causal—to Chrysippus.

Several testimonia credit a doctor Chrysippus with pharmacological recipes, but these recipes probably do not belong to Chrysippus son of Aristagoras. First, a scholium on Nicander \textit{Ther.} 845 attributes a pharmacological book περὶ λαχάνων “On Vegetables,” to a Chrysippus. Recent scholarship has given this to Chrysippus son of Erineos; Chrysippus discipulus, author of the \textit{Georgics}, is also the possible author.\textsuperscript{25} Pliny lists a Chrysippus among his foreign authors for his medical books: this too is either Chrysippus son of Erineos or Chrysippus discipulus.\textsuperscript{26} Rufus of Ephesus \textit{De renum et vesicar morbis} 1.12 lists

\begin{quote}
about Erasistratus but not Chrysippus.
\end{quote}

\textsuperscript{22} Erasistr. \textit{frr.} 164, 286, 287.


\textsuperscript{24} I entertain one speculation about the relationship between Chrysippus and Erasistratus. Erasistratus appears to be the source for Galen \textit{Hipp. Epid. II} (\textit{CMG} V 10.1 p.208). Here Chrysippus treated a patient who imagined that she had swallowed a snake. He gave her a light emetic and, when she vomited, secretly threw a snake into the vomit basin. Themes of mental illness, physical suffering, and the doctor’s trickery in a successful treatment also underlie the Antiochus-Stratonice episode of Erasistratus’ career. V. Nutton, \textit{Galeni De praecognitione} (Berlin 1979) 194–196, lists sources for these ancient stories about Erasistratus; I am skeptical of their historicity. Historicity aside, is it possible that Erasistratus’ report about Chrysippus provided the literary framework or inspiration for these later stories about Erasistratus?

\textsuperscript{25} Irby-Massie, \textit{EANS} 474.

\textsuperscript{26} \textit{HN} 1 \textit{ex auctoribus}, Lib. 20, 21, 22, 23, 24, 25, 26, 27, 29, 30. That the Chrysippus of \textit{HN} 30.103 is either Chrysippus son of Erineos or Chrysippus discipulus and not the Stoic Chrysippus of Soli see C. Nailis, “Chrysippus
a compounded cataplasm of a Chrysippus: this recipe probably belongs to the author of “On Vegetables.” Finally, Caelius Aurelianus Tardae passiones 1.140 lists a Chrysippus among older physicians who wrote recipes for epilepsy: this recipe probably ought to be attributed to Chrysippus son of Erineos.27

Yet from other testimonia it is plausible that Chrysippus wrote pharmacological recipes. Pharmacological interests are attested for two of his students, Aristogenes and Erasistratus.28 Extant testimonia for Chrysippus show a physician interested above all in therapeutic practice; it seems unlikely that he neglected pharmacology in his therapeutics. Pliny HV 26.10 claimed that the books of a Chrysippus were full of herbals. From Pliny’s mention of Erasistratus in the same context it is likely that this Chrysippus is Erasistratus’ teacher. Furthermore, Celsus 5.18.30 is a recipe for an emollient attributed to a Chrysippus. While it is possible to attribute the emollient to either Chrysippus son of Erineos or Chrysippus discipulus, Celsus (5.18.27) has just attributed an emollient to Aristogenes, the direct student of Chrysippus. The plausible conjunction of student and teacher in the text suggests that 5.18.30 ought to refer to Chrysippus.

Only Diogenes Laertius 8.89 preserves evidence of a title for Chrysippus: οὗ τὰ θεραπεύματα φέρεται ὁρατικά, “Treatments for Sight.”29 The evidence for what Chrysippus wrote is very

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27 I agree with I. E. Drabkin, Caelius Aurelianus: On Acute Diseases and On Chronic Diseases (Chicago 1950) 1006, that Caelius Aurelianus’ other passages discussing the views of ‘Chrysippus’ ought to be attributed to Chrysippus the follower of Asclepiades.

28 For Aristogenes’ pharmacology see Celsus Med. 5.18.27; for Erasistratus’ see Garofalo, Erasistrati fragmenta 56–58.

29 The best evidence for the standard interpretation of 8.89, which understands the phrase as a book title, is Diogenes’ own typical usage of the

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slim. Diogenes 8.89 in distinguishing Chrysippus and Chrysippus son of Erineos also contrasts Chrysippus’ one attributed book with the circulation of books by Chrysippus son of Erineos (possibly the pharmacology discussed above). The contrast seems to imply that Chrysippus’ books were no longer in circulation in Diogenes’ day, an impression confirmed already by Galen’s difficulty in finding Chrysippus’ books one hundred years earlier. Galen’s remark that “the books of Chrysippus are in danger of being lost” is the only direct evidence that Galen knew written works by Chrysippus. The indirect evidence that Chrysippus wrote rests on three texts. First, Galen HNH XV 135–136 states that no ancient physicians (Chrysippus among them) knew the eight blood vessels from the head described in Hippocrates Nature of Man. Second, Pliny HN 26.10 says that the books of Diocles, Praxagoras, Chrysippus, Erasistratus, and Herophilus mentioned herbals. Third, Pliny claims that “Chrysippus altered the doctrines [of Hippocrates and Prodicus] by his enormous garrulity” (29.5, placita Chrysippus ingenti garrulitate mutavit); possibly Pliny refers to books rather

30 Contrast the evidence that van der Eijk, in Philosophy and the Sciences 76–77, is able to marshal for titles of other fourth-century medical authors.

than oral teaching. Testimonia about Chrysippus’ views appear to have been transmitted by or in conjunction with his students. In at least eight passages Erasistratus seems to have been the primary source of later authorities’ information.\textsuperscript{32} Since doxographical knowledge of Chrysippus seems to continue after the disappearance of his books, the listing of Chrysippus’ opinions in later authors (such as Ps.-Caelius Aurelianus and John of Alexandria) ought to be understood as part of the Nachleben of Erasistratus. It is too skeptical to deny that Chrysippus wrote, but his works certainly did not survive long.

Chrysippus’ students in medicine included Erasistratus of Ceos, Aristogenes, and Medius.\textsuperscript{33} The three are each associated with different geographical locales. The tradition around Erasistratus is confused; he may have worked in both Alexandria and Antioch at the Ptolemaic and Seleucid courts.\textsuperscript{34} Aristogenes became a doctor at the court of Antigonus Gonatas.\textsuperscript{35} Medius was a doctor to Theophrastus and possible maternal uncle of Erasistratus, working seemingly in Athens.\textsuperscript{36} Galen Ven.Sect.Er. XI 151–152 further names Apeimantes and Strato both fellow students of Erasistratus and students of Chrysippus. Strato is associated with Erasistratus in other texts; Apeimantes


\textsuperscript{34} See J. Scarborough’s opinio communis in EANS 294.

\textsuperscript{35} For Keyser, EANS 137, primary sources are Suda α3911 and Celsus Med. 3.21.3. The Suda entry confuses Chrysippus of Soli the philosopher and Chrysippus of Cnidus the physician. In Celsus the name of Chrysippus’ student has fallen out, but I agree with Keyser that Aristogenes is probably correct on the strength of Suda α3911. As P. M. Fraser, Ptolemaic Alexandria (Oxford 1972) III 503 n.49, already saw with credit to Susemihl, Suda α3910 and α3911 refer to the same individual. Suda α3911 gives Aristogenes the ethnic Cnidian but α3910 the ethnic Thasian.

\textsuperscript{36} Keyser, EANS 536.
is otherwise completely unknown.

There is a discourse with terms relating to family life (oikía, δοῦλος, τρόφιμος) used by ancient authors to indicate a pupil-teacher relationship in medical education. Bacchius the Herophilean wrote a book about Herophilus’ pupils called *Memoirs of Herophilus and Those from his House* (oikíaς). But the Herophileans were not the only sect to use the term ‘house’ of a medical student; the Erasistrateans used it too, as Galen records:

For in order to leave off the rest I will mention Strato, since he knew Erasistratus, writing at his house and for this reason said to have been a slave to the man—anyway, he says (etc.)

Strato was from the house of Erasistratus and had been a slave (δεδουλευκέναι τάνδρι), although it is difficult to take this phrase literally. Galen himself is careful to note that common speculation merely infers that Strato was a slave from the association of slaves with an oikos. Diogenes Laertius 5.61 specifies the relationship more clearly: “The third Strato was a doctor, a student of Erasistratus, but as some say, a foster-child (τρόφιμος) of Erasistratus.” Diogenes’ term τρόφιμος picks up Galen’s δεδουλευκέναι τάνδρι. τρόφιμος was said of a slave’s master (inappropriate here) or the foster-child of someone: as applied to Strato it suggests that he was unable to support himself and depended on Erasistratus for food and shelter. Chrysippus’ own student Aristogenes is said to have been a slave of Chrysippus, δοῦλος Χρυσίππου (*Suda α3911*). Was Aristogenes really a chattel slave of Chrysippus? Perhaps. Aristogenes later became the court physician to Antigonus Gonatas and it is possible that a former slave rose to such a socially prominent position.

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39 Hermippus of Berytus, who was probably a freedman under Hadrian,
What is striking in all these terms is the ease of social mobility between slave and free, dependence and independence. Philological analysis of these terms is complicated by the fact that they are drawn from different sources and time periods. Rather than investigate these terms philologically, it seems better to emphasize the social and economic dependence the terms portray. That is to say, at stake in these texts are ideologies of power differentials and obligations (both social and economic), not the juridical classification of slave subjugation. After all, a consequence of Alexander of Macedon’s wars and the subsequent colonizations was the intermingling of Greek-style chattel slavery with native forms of dependence in Egypt and the Near East. Finley in particular sketched the social variety of the institutions between slave and free in antiquity from a wide variety of evidence. Following Finley’s lead I suggest that the terms for family life discussed above are expressions of a similar discursive system, so that Aristogenes’ relationship to Chrysippus is similar to Strato’s dependence on Erasistratus. A possible hypothesis which accounts for the metaphorical use of these terms for family life is a social situation in which the medical student indebts himself to his teacher for his education in exchange for the household duties of a slave. The terms ἰκία, δοῦλος, τρόφιμος indicate a system of economic exchange predicated on personal trust between teacher and

wrote a book called τῶν διαπρεσάντων ἐν παιδείᾳ δούλων, “Slaves prominent in learning” (Suda 1706). It is possible that the notices of prominent slaves in the Suda, such as Aristogenes in α3911, are ultimately derived from this book. See J. Radicke, FGrHist 1061. Hermippus also wrote a book about physicians called περὶ ἐνδόξων ἱατρῶν, “On famous physicians.” N. Massar, Soigner et servir: Histoire sociale et culturelle de la médecine grecque à l’époque hellénistique (Paris 2005) 183–184, thinks either book a possible source for the Suda notice on Aristogenes.


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student: the student, impoverished and financially insecure, indebted himself to his teacher to perform housework and other menial chores in the manner of a slave in exchange for food, shelter, and medical education.42

Chrysippus also likely had at least two other students. Diogenes Laertius 7.186 records that Chrysippus’ son Chrysippus (Chrysippus filius) was also a doctor. Given the family lineage of early medicine known from the Hippocratic Oath, it would be surprising if someone other than his father had served as his medical teacher. Second, the evidence about Erasistratus records another student from his medical education, Nicias of Miletus.43 It is probable that listing someone as a fellow-student of Erasistratus implies that they shared the same well-known medical teacher, although Chrysippus is not named in reports of Nicias’ education. Galen’s talk of the “school” of Chrysippus

42 Supporting evidence for the menial service performed by Aristogenes and Strato comes from the second century BCE inscription which provides the best evidence about medical education in the teacher-pupil lineages of antiquity, E. Samama, Les médecins dans le monde grec: sources épigraphiques (Geneva 2003) no. 137, the training of Onasander by Antipater: Onasander is said to have been the ὑπηρέτης “assistant” and ὑπηρετῶν “assisted” his teacher. Similar duration and subservience appear in the late third century BCE contract for medical education P.Hei. III 226: “Sosicrates gave out (ἐξέδωκεν) Philon to Theodotus for six years on condition that he will teach medicine.” Whether this papyrus is a real contract or a scribal model, the transfer of power (LSJ s.v. ἐκδίδωμι 1.2.b) is clear: Philon is moving into an apprenticeship. Terms for service to intellectuals are also attached to third and second century contemporaries. The historian Ister is called Καλλιμάχου δοῦλος καὶ γνώριμος, “slave and pupil of Callimachus” in Suda 1706. Since γνώριμος is regularly employed to indicate a pupilage relationship (LSJ s.v. I.3.2), I understand Ister to have indebted himself to Callimachus in exchange for tutelage, perhaps as an amanuensis (so Fraser, Ptolemaic Alexandria I 777). Fraser (II 744 n.183) further compares the biographical tradition of the historian Agatharchides of Cnidus, called a θρηπτός to a courtier of Ptolemy VI Philometor.

43 Schol. Theocr. 11 arg., where Nicias is said to have been a συμφοτητής of Erasistratus. Galen uses the same term of Herophilus and Phylotimus as students of Praxagoras (MM X 20) and of Strato and Apeimantes as fellow students of Erasistratus (Ven.Sect.Er. XI 151).
is a purely doxographical construct, dependent on the criterion of the rejection of therapeutic phlebotomy. For Galen once refers to Chrysippus’ school, διδασκαλεῖον, but never uses the term ἀἵρεσις, sect, in reference to him. The terminology of ἀἵρεσεις ἰατρικαί, medical sects, did not arise until the students of Herophilus and Erasistratus, two generations after Chrysippus.

Chrysippus’ students came from Ceos, Cnidus, Miletus, and elsewhere in the Aegean. Along with Cos, Cnidus was one the two centers famous for its medical education during the Classical period. It is difficult to decide whether his students chose Chrysippus as their teacher from his own reputation or from Cnidus’ general fame in medicine. Chrysippus’ students were very successful: Erasistratus, Aristogenes, and Chrysippus filius became court physicians to different Hellenistic monarchs. While surely some of their success was due to their own abilities and political connections among courtiers, Chrysippus himself must have enjoyed some degree of reputation to acquire such quality students.

Doxographies position Chrysippus’ students, including Erasistratus, as Peripatetics. Sextus Empiricus Math. 1.258 credits Chrysippus with another student Metrodorus, the third husband of Aristotle’s daughter Pythia, with whom he had a son also named Aristotle. Kroll understood Sextus to have confused the names of Metrodorus and Medius, the student of Chrysippus.

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44 Compare Galen Ven.Sect.Ex.Rom. XI 197, o’i t’’ álloi pántes oí úpó toú Xhrístou phainontai poioúntes [sc. tás therapeías chrístës phlebòtomía].
47 On the hiring of doctors in the Hellenistic courts see Massar, Soigner et servir 51–63, 184–193; in “‘Choose Your Master Well’: Medical Training, Testimonies, and Claims to Authority,” in M. Horstmanhoff (ed.), Hippocrates and Medical Education (Leiden 2010) 175–179, Massar argues that Chrysippus’ fame facilitated his students’ careers.
Medius is mentioned in Theophrastus’ will (Diog. Laert. 5.53) as the father of Aristotle, grandson of the homonymous philosopher. Thus both Sextus and Diogenes place a student of Chrysippus within Aristotle’s household and among the students of Theophrastus’ Peripatos. Theophrastus’ will seems a surer historical source than Sextus’ offhand statement. While I conclude that Medius was the father of Aristotle, grandson of the homonymous philosopher, we cannot dismiss the person of Metrodorus. Inscriptions offer circumstantial evidence for Metrodorus as another possible student of Chrysippus. There is at least historical truth to Medius’ association with both Chrysippus and Theophrastus.

This historical fact gave rise to a further doxographical tradition about Erasistratus’ relationship to the Aristotelians, attempting to explain Erasistratus’ mechanism and horror vacui as consequences of Aristotelian philosophy.

First, Sextus

49 Fraser, RendIstLomb 103 (1969) 525, following Dittenberger, suggested that the Metrodorus listed as the student of Chrysippus in Sextus Empiricus was identical to the physician Metrodorus of Amphipolis honored by Antiochus and Seleucus in an inscription from Ilion dated by the co-regency of the kings 279–268 BCE (Samama, Les médecins no. 182). Wellman, Hermes 65 (1930) 327, argued that Metrodorus was a court doctor (and thus possibly the Erasistratean); Massar, Soigner et servir 103–111, also follows this interpretation. Metrodorus’ lack of the title archiatros, royal physician, is not an impediment to Wellmann’s thesis, since this title arose later (V. Nutton, “Archiatri and the Medical Profession in Antiquity,” in From Democedes to Harvey [London 1988; orig. 1977] 193–194, puts the earliest instance of archiatros in the late third century; Samama, Les médecins no. 233, objects to the restoration here of archiatros). Samama 304 n.15 suggests that Metrodorus of Amphipolis in the inscription was also a proxenos for Cos where he resided for eleven years before service to Antiochus, thus strengthening the claim that he was a royal physician. If these testimonia have been properly attributed to the same individual, Metrodorus the physician had associations with Amphipolis, Cos, and the Seleucids and flourished ca. 290–270. Epigraphic evidence thus places this Metrodorus near the times and places of Aristotle, Chrysippus, and Erasistratus.

50 Notions of ‘influence’ were widespread in antiquity and in earlier scholarship. Better modern discussions are Garofalo, Erasstraï fragmenta 33–34,
Empiricus names Metrodorus (within the Peripatos, according to Sextus) as a teacher of Erasistratus. Second, Diogenes Laertius 5.57 says that it is likely (εἰκός) that Erasistratus was Theophrastus’ student. Glucker has drawn attention to passages where Galen denies that Erasistratus ever was in fact a student of Theophrastus.51 The close association between Erasistratus and Chrysippus and the association of Chrysippus’ sure student Medius with the Peripatos seem to have linked Erasistratus with the Aristotelians by teaching lineage.

It is therefore surprising that Diogenes Laertius 8.89, quoted above (421), links Chrysippus with the Platonic tradition of medicine. Scholars have correctly understood Diogenes’ τούτου γέγονε παῖς Ἀρισταγόρας, οὗ Χρύσιππος Αεθλίου μαθητής to mean “Chrysippus’ son was Aristagoras, whose son Chrysippus was a student of Aethlius.”52 Typical Greek naming practice of alternating male names every second generation was probably the correct justification: Chrysippus was the grandson of Chrysippus. I caution that we ignore Diogenes’ doxographical point if we read the Greek only in this way. For if Chrysippus was the son of Aristagoras, the son of a famous doctor and thus presumably a doctor himself, why did Chrysippus have his father as his medical instructor and still take


52 Wellmann, RE 3 (1899) 2510; Fraser, RendIstLomb 103 (1969) 522, Ptolemaic Alexandria I 347; Keyser, ELAVS 475.
another instructor far less famous? Aethlius is an uncommon name and an obscure personage to identify as the teacher of a famous physician.\textsuperscript{53} The obscurity of Aethlius ought to suggest a broader doxographical point: whoever was Chrysippus’ teacher (his father Aristagoras or the obscure Aethlius), the point is that Chrysippus was a student by lineage of the Platonic tradition of medical knowledge (Eudoxus and Philistion, probable source of the medical content of the \textit{Timaeus}).\textsuperscript{54} Thus, Diogenes suggests, the Platonic medical tradition was passed on through Chrysippus to the Hellenistic generations.

Chrysippus is linked to the Platonic tradition of medicine through his family lineage; his students, however, are linked to the Peripatos. Rather than resolve this tension, I see it as a product of the limits of ancient medical doxography. Chrysippus did not fit easily into one doxographical tradition. He came from the Asclepiad tradition of medicine in one of its historical centers but, as he abstained from phlebotomy, could not be labeled a Hippocratic. He produced one of the foremost expositors of Rationalist medicine but, as his students pointedly never mentioned his treatment of causes, could not easily be labeled a Rationalist.\textsuperscript{55} Is the evidence of Diogenes Laertius 8.89 therefore a doxographical fiction, imputing to Chrysippus a medical genealogy that links unconnected threads of Classical and Hellenistic physicians? If so, Chrysippus’ genealogical association is implausibly written, for Diogenes makes no attempt

\textsuperscript{53} \textit{LGPN} knows no Αἴθλιος, Αἴθλιος, or Αεθλίος. The only known Αἴθλιος beyond this passage is a fifth-century BCE historian of Samos: A. D’Hautcourt, “Aethlios of Samos (536),” \textit{Brill’s New Jacoby} (2013, online).

\textsuperscript{54} On Philistion and Plato see Nutton, \textit{Ancient Medicine} 116–117. Possibly Chrysippus was construed as the conduit between Philistion and Erasistratus, since pneuma plays a large role in the theories of both; cf. Garofalo, \textit{Erasistrati fragmenta} 38–39. Yet no testimonium about Chrysippus mentions pneuma.

\textsuperscript{55} Galen \textit{Med.Exp.} 110 Walzer notes that Erasistratus does not praise Chrysippus for his discussion of causes. The later John of Alexandria \textit{In Galen De sectis commentaria} proem. 2ra (16 Pritchett) explicitly labels Chrysippus a Rationalist, in contrast to all other sources.
to connect Chrysippus to the better-established figure of Era-
sistratus. Instead, Chrysippus seems to emerge in Diogenes
from an older tradition.

Connecting the disparate threads of ancient medical testi-
monia and “extrapolating wholes from fragments” is inevitably
a methodological procedure limited and qualified by sources.\textsuperscript{56}
In writing the fragmentary ancient medical past it is safer to
suggest that our knowledge is uneven and lacunose, rather than
infer a uniform ancient tradition. Our provisional knowledge of
Chrysippus’ career is stronger than our knowledge of his medi-
cal doctrines or practices. From the testimonia Chrysippus
appears as a transitional medical figure, trained within the old
medical families of Cnidus but with an innovative therapeutics.
His students Erasistratus, Aristogenes, Medius, Strato, Apei-
mantès, Chrysippus filius, Nicias, and Metrodorus came for
their training to Cnidus, the old center of Greek medical
education. Some took positions in the new urban centers of the
Greek world and their associated seats of power in Alexandria,
Seleucia, Athens, and the Antigonid court. So Celsus’ intro-
duction was not wrong to unite Chrysippus and Praxagoras of
Cos in his medical history. Chrysippus parallels Praxagoras as a
transitional medical figure between the old Hippocratic world
of medicine in the Aegean and the emerging Hellenistic pan-
oply of regional centers and medical sects.

The evidence about the physician Chrysippus of Cnidus son
of Aristagoras (\textit{RE} 16) shows him to have been one of the most
influential of the non-sectarian physicians of the late fourth and
early third century. The following list of testimonia is intended
to be a contribution toward a future comprehensive compila-
tion.

\textsuperscript{56} H. von Staden, “Rupture and Continuity: Hellenistic Reflections on
the History of Medicine,” in P. van der Eijk (ed.), \textit{Ancient Histories of Medicine:
Essays in Medical Doxography and Historiography in Classical Antiquity} (Leiden
1999) 144.
EANS 475 lists fourteen testimonia that mention Chrysippus’ name:

1. Diog. Laert. 7.186 (Erasistr. fr.10 Garofalo)
2. Diog. Laert. 8.89
3. Galen Ut.Resp. IV 495–496
5. Galen Ven.Sect.Er. XI 151–152
14. Galen Hipp.Epid.VI XVII/1 872–873

I find seventeen additional testimonia that mention his name:

18. Galen Med.Exp. 110 Walzer (Erasistr. fr.117B)
20. Marcellinus De pulsibus 1, 45 Schöne (Erasistr. fr.20A)
21. Marcellinus De pulsibus 3, 71 (Erasistr. fr.20B)
22. Marcellinus De pulsibus 9, 234–241 (Erasistr. fr.206)
23. Celsus Med. praeef. 8 (Erasistr. fr.9 G)
24. Celsus Med. 3.21.3
25. Celsus Med. 5.18.30
26. Laurentianus 73.1 143+ col. 2 line 24
27. Pliny NH 26.10 (Erasistr. fr.68)
28. Pliny NH 29.5 (Erasistr. fr.8)
29. Ps.-Caelius Aurelianus De responsis 9 (Erasistr. fr.194)

57 Wellmann, Hermes 35 (1900) 370.
58 Wellmann, Hermes 35 (1900) 378, emends Agrius of the manuscript to Aethlius from Diog. Laer. 8.89. The text is V. Rose, Anecdota graeca et graeco-latinum II (Berlin 1870) 207–208.
John of Alexandria In Galeni De sectis commentaria proem 2ra
Suda α3910–3911

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