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HERBS AND HEALERS FROM THE ANCIENT MEDITERRANEAN THROUGH THE MEDIEVAL WEST

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Medicine in the Medieval Mediterranean

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Medicine in the Medieval Mediterranean is a series devoted to all aspects of medicine in the Mediterranean area during the Middle Ages, from the 3rd/4th centuries to the 16th. Though with a focus on Greek medicine, diffused through the whole Mediterranean world and especially developed in Byzantium, it also includes the contributions of the cultures that were present or emerged in the area during the Middle Ages and after, and which interacted with Byzantium: the Latin West and early vernacular languages, the Syrian and Arabic worlds, Armenian, Georgian and Coptic groups, Jewish and Slavic cultures and Turkish peoples, particularly the Ottomans.

Medicine is understood in a broad sense: not only medical theory, but also the health conditions of people, nosology and epidemiology, diet and therapy, practice and teaching, doctors and hospitals, the economy of health, and the non-conventional forms of medicine from faith to magic, that is, all the spectrum of activities dealing with human health. The series includes texts and studies, bringing to light previously unknown, overlooked or poorly known documents interpreted with the most appropriate methods, and publishing the results of important new research.

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Herbs and Healers from the Ancient Mediterranean through the Medieval West

Essays in Honor of John M. Riddle

Edited by

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Introduction

Alain Touwaide

From Cleopatra and substitution literature in antiquity, to the possible use of ancient therapeutic information as a source for new pharmacological studies, to an Internet project devoted to medieval plant lore, the essays in the present volume walk in the footsteps of John Riddle along his scientific itinerary. At the same time, these new investigations rooted in and capitalizing on Riddle's activity illustrate the many facets and the fertilizing role of his multiple contributions, identify areas that still need to be explored, and propose new approaches for fresh research.

The almost mythical Cleopatra sets the stage. Credited with an expertise in drugs, venoms, poisons, and perfumes illustrated by an abundant apocryphal literature, and believed to have applied such science to herself to commit suicide in a supposedly painless way, she is at the center of an essay by John Scarborough that throws light on physicians in her entourage. With this contribution and the following by Alain Touwaide on a table of substitution drugs that hints at a possible tension between text and practice, we enter directly into the world of ancient materia medica and the practice of pharmacy, with substances from a multitude of places, collections of formulae for medicines and other preparations, and the healers, charlatans, merchants, and others who populated the streets of the capital of the Ptolemaic kingdom and the cities of the late Roman republic and early empire. This world was probably haunted by such figures as—to mention but a few—Mithridates, who took his own life to escape Roman troops, Nicander of Colophon, who composed two poems in Homeric verses on venoms and poisons, and the Roman general Aelius Gallus, who brought formulae for antidotes against venomous snake bites from Arabia to Rome. It was a colorful and intriguing world, frequented by individuals of every provenance, education, and type of activity, manipulating healing herbs, parts of rare animals, and toxic minerals, reading and writing grimoires, pharmacopoeias, and magic incantations alike, and probably also relieving their patients' ailments, although sometimes, instead, taking their lives.

This is the complex world John Riddle entered and tried to decode. It was a world that was not well understood and was even largely unknown when he first

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engaged with it, following the precursory explorations of Loren MacKinney, Riddle's mentor at the University of North Carolina. Focusing on the Western Middle Ages—without limiting himself to it, however—Riddle came upon the first-century Greek masterwork of Dioscorides, *De materia medica*, which has nourished Western pharmaco-therapeutic practice throughout its history. His research on this masterpiece spanned the period from its origin to its reception during the Renaissance, and this work defined the aim and scope of his own activity. It also established his method: understanding the way ancient and medieval pharmaco-chemical literature worked by getting out of the framework of formal history and exploring the medico-chemical basis of ancient therapeutics, and tracing the path(s) taken by this body of knowledge from its birthplace to the West, following its reception, assimilation, and transformation(s), and also highlighting its foundational role in shaping modern medico-pharmaceutical science.

Each of these components of John Riddle's work is reflected in the present collection in his honor. It constitutes an itinerary in four stages from the eastern Mediterranean to the West, from antiquity to early modern times. After the first two essays on antiquity mentioned above, we cross the Mediterranean from Alexandria to Salerno, the *porta maior* of the road followed by medicine on its way to the West. As Florence Eliza Glaze tells us, Gariopontus was a link between two universes, late antiquity and the new medical world-in-the-making in Salerno 20 or 30 years before Constantine the African. Gariopontus collected existing texts, and reshaped and reorganized them, creating a new medical synthesis. His work, in turn, was further linked with other texts, commented on, explained, and amplified by generations of teacher-commentators until the fifteenth century, and it contributed to creating the Latin medical lexicon in the West. A key element in the reappropriation of the ancient legacy was the theory on drug actions, particularly the Galenic system of degrees. As Faith Wallis's analysis of Constantine's Liber graduum and its commentaries shows, the medieval attempts to reassimilate such theory into medicine were not necessarily successful. Her essay shows that, if Constantine's treatise was studied in the early Middle Ages, including by Bartholomeus of Salerno, it did not make its way into the core text of theoretical medieval medicine, the Articella. That work was initially focused on diagnosis and prognosis (with some theoretical notions) and slightly expanded later to include therapeutic actions. Nevertheless, the theory of degrees was not simply ignored in the Middle Ages.

As Winston Black explains in his essay, as early as one or two generations after Constantine lived, his work was versified across the Alps as far away as England. Such poems were reproduced for almost 500 years, reaching the age of printing, most probably because they were read and used. Nevertheless, whereas these

works and their subsequent tradition attest to the importance and usefulness of theory, they also point to the reason why such theory failed to be included in some textbooks of learned medicine: in Constantine's *Liber graduum* it was problematic and unclear in more than one passage. These difficult parts were simplified or omitted in many of the poems that versified Constantine's treatise. They thus simplified the *Liber graduum* into basic information so as to make it easily assimilable in the practice of therapeutics and gave to the theory of degrees a sort of extracurricular continuity that guaranteed its presence in medieval medicine.

In its third part, the volume moves toward the heart of Northern Europe and goes beyond the Middle Ages to pre-modern botany. It begins, however, with Maria Amalia D'Aronco commenting on the late antique pharmaceutical corpus and its translation from Latin into Old English in the tenth-century Anglo-Saxon world. Translators did not always know the exact equivalent of the plant names mentioned in the texts they were working on and opted for different strategies to render them. Some resulted in namings that are still mysterious. This is the case of *elehtre*, a plant whose identity has puzzled interpreters for years. A plausible identification is proposed here, which sheds new light on the mechanics of medical lore beyond the transmission of ancient data in England and the discovery of the therapeutic properties of plants. Whereas early Anglo-Saxon translators had difficulty with Latin texts, later English writers, including Chaucer, were so much at ease with medicinal plants and their properties that they could use them as a matter for jokes that all audiences could understand, from the learned to the popular, thus witnessing to the assimilation and diffusion of knowledge of plant lore in society, as Linda Ehrsam Voigts demonstrates here.

The mechanisms underpinning the circulation, assimilation, and transformation(s) of earlier texts in Central Europe were probably not much different and require patient textual analysis to bring to light material hidden in apparently well-known works. As Gundolf Keil shows, this is the case for a group of manuscripts containing the Old German translation of a Salernitan text, Roger's *Aphorisms*, into which they introduced material from other works. A close textual scrutiny uncovers a manual of surgery specifically devoted to the treatment of hemorrhages, extraction of projectiles, and wounds due to weapons. This manual may date back to the early fifteenth century and is probably the most ancient in German on the treatment of wounds caused by firearms. Together with three others previously known, this newly discovered treatise attests to a developed knowledge of field surgery that played an important role in the Central European conflicts of that time.

Turning again to plant lore and its transmission through the ages, Karen Reeds demonstrates how the classical tradition was later challenged by new

interpretations, using Saint John's Wort as an example. Whereas the 1546 Kreüter Buoch by Tragus, actually Hieronymus Bock, reveals an anti-classical trend—it was written in German, for Germans, and was about German plants, also providing readers with a table of diseases in German—it stayed close to Dioscorides and Galen in the description of the effects of the plant. At the same time, however, it reproduced popular traditions, magical practices, and folklore. Bock's contemporary, Paracelsus, departed further from the classical tradition, emptying out Galenic properties and prescribing Saint John's Wort on a magical, apotropaic basis in a way that meant the end of its classical uses. Strangely enough, however, the modern use of Saint John's Wort as an antidepressant is said to be based on Paracelsus.

The study of Saint John's Wort leads us to the fourth stage in our journey with John Riddle from the Mediterranean into the European West and from the past to the present day. John K. Crellin's study echoes Riddle's pharmacological analysis of ancient and medieval pharmaceutical prescriptions and their possible application in contemporary pharmaceutical studies, and also suggests future scientific research in the history of medieval pharmacy. Firmly convinced of the scientific value and therapeutic efficacy of ancient drug lore—perceptible through the "drug affinity" system that he detected in Dioscorides' classification of drugs—John Riddle explored the world of contraceptive and abortifacient agents in ancient and medieval literature. He believed that such substances were the object of widespread common knowledge that was later forgotten. His two books on this topic, Eve's Herbs: A History of Contraception and Abortion in the West and Contraception and Abortion from the Ancient World to the Renaissance now followed by Goddesses, Elixirs, and Witches: Plants and Sexuality throughout Human History—triggered a polemic that even today invites us to try to perceive the factors that may have guided and still guide practitioners in choices of one therapeutic strategy over another. The accumulation of micro-decisions over a period of time may lead to significant changes, characterized by the emergence of new drugs and methods of treatment and the abandonment of others, however well rooted and widely practiced for a certain period. This type of fundamental, hard-to-ascertain information is exactly what historians, be they of pharmacy or any other aspect of human life, must try to ascertain in the texts they read.

The current unprecedented development of information technologies, with their cutting-edge ideas and shortening of communication time, enable access to information, sharing of resources, and accumulation of data in a way previously impossible. To conclude the volume, Helmut W. Klug and Roman Weinberger describe their newly developed Internet tool, the Medieval Plant Survey, as an effective means for scholars to collaborate and collectively sum up all currently available information on medieval plants. Such a tool can enable new

investigations into the realm of medicinal plants, relying on a collective database that includes not only all available data, but also all approaches to the data.

Through this literary itinerary, the present collection of essays not only revisits John Riddle's journey into medieval pharmaceutical literature—which was almost a *terra incognita* when he embarked on his explorations—but also illustrates the validity of his method: from the deciphering of texts to the interpretation of their contents by introducing medicine, pharmacy, and chemistry into historical studies. This is certainly his most original achievement, one that will undoubtedly be his most enduring contribution to scholarship.

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