

**William Musgrave (1655–1721):
An Early Modern New College Natural Philosopher, Physician, and Antiquary**

The College is delighted to have recently acquired a portrait of former fellow William Musgrave (1655–1721), natural philosopher, physician, and antiquary. The portrait, three-quarter length in oils, roughly 1.3 × 1m, was obtained through Adam's of Dublin, and came from Tempo Manor, Enniskillen, County Fermanagh. It is currently undergoing conservation before proper display. This note is the first of hopefully several by different hands on this interesting figure and our new portrait of him. This opening note will offer a brief overview of Musgrave's earlier career in Oxford science, with some sightings of his books around Oxford, including his book donations to his own college.



William Musgrave by Thomas Hawker (1640–1725)—*not* our portrait,
but this image in the public domain, courtesy of Exeter City Council

William Musgrave is a figure now and then encountered in the history of early modern English science and scholarship, but one usually standing obscurely on the margins.¹ In the age of Boyle, Newton, and Hooke, this is probably fair enough, but Musgrave's career illuminates particularly clearly the way in which what today we would think of as quite different intellectual pursuits—

¹ Basic biographical information on him can be found in Wood's *Athenae Oxonienses*, Munk's Roll, and the *Oxford Dictionary of National Biography*.

science and antiquarianism—were in this period often cultivated by the same scholars. Indeed, in this case, Musgrave started off his career at New College with a pronounced interest in the new experimental science; but in his mid-thirties he moved to provincial Exeter, where he practised with great success as a physician, and devoted his leisure to the study of local antiquities. Eventually he published in Exeter four beautifully produced octavo volumes on his local researches. These he presented to his old college, and turning the pages of these works of archaeology, epigraphy, and philology, it is startling to reflect that the author is the same man who, while still a young resident fellow of New College, had in the 1680s also served as second Secretary to the Royal Society of London. One of his responsibilities as such was to edit the Society’s journal, *The Philosophical Transactions*, today the oldest still-running scientific journal in the world. It is not often remembered that this icon of the scientific revolution was therefore, at least for a dozen issues² in the mid-1680s, edited from New College, Oxford.

Musgrave was born in Nettlecombe, Somerset, and went on a scholarship to Winchester College in 1669. He followed the usual path to New College, where he was admitted as a scholar in 1675, confirmed as a full fellow two years later, and remained on the fellowship until 1692, a rather long collegiate stretch in those days. This was partly because Musgrave did not go into the Church, and so there was no easy promotion to a college living for him. Instead, he trained as a physician, and indeed he appears in the matriculation register for the University of Leiden in March 1680, and so spent a season studying at that university’s famous medical school. But he soon returned to New College, and graduated as a Bachelor of Civil Law in mid 1682. This may seem surprising, but in fact the law degree was a well-trodden route for those who wanted to keep their intellectual options open, and themselves out of holy orders. Thereafter Musgrave collected a full house, as it were, of all the degrees and honours open to a medical man with experimentalist tastes: after the BCL of 1682 came a Fellowship of the Royal Society in 1684; Musgrave then took the Bachelor of Medicine in 1685 and the full doctorate in 1689; and in 1690 he became a Candidate of the Royal College of Physicians and finally in 1692 a Fellow of the same. By that time, he had moved to Exeter for the final phase of his career, and there he started publishing his own works: chiefly two Latin medical dissertations on arthritis (1703, 1707), and the four parts of his antiquarian *Antiquitates Britanno-Belgicae* (1711–20). He proudly signed most of these ‘Regiæ Societatis utriusque socius’—‘fellow of both Royal Societies’, but what is striking about his Exeter publications is that Musgrave published and sold his books in Exeter, his imprint line always reading ‘Iscae Dunmoniorum’, his Latin name for Exeter.³ There was printing in Exeter when Musgrave lived there, but his own books are noticeably high-quality productions. Musgrave was hugely committed to his final city of residence, and used his work to promote it, and the whole Devon and Cornwall region, culturally. He signed himself, too, as if of the original tribe the Romans had found there over one and a half thousand years previously—William Musgrave, ‘Belga’.

For now, though, it is Musgrave’s time at New College that concerns us. Musgrave’s actions as a fellow remain only partially visible, but one major highlight of his career as a don must have been when Musgrave, ‘bachelor of law and student in physick’, delivered the English speech on behalf of the college upon the visit of the Duke of York, the future James II, in 1683—‘Which done they went into the chappell, viewd it, and were entertained with a pleasant voluntary from

² Being *Philosophical Transactions*, nos. 167–78 = vol. 15 (1684–85).

³ Of the nine imprints signed from ‘Iscae Dunmoniorum’ in the period, seven were Musgrave titles or collections; an eighth comprised divine poetry in Latin by an associate of Musgrave; and the ninth, published in 1711, was an edition of Pomponius Mela, edited by Musgrave’s ‘leaned neighbour’ John Reynolds. This latter edition was graced by twenty-six maps, engraved locally by Joseph Coles of Exeter. Many were dedicated to specific individuals as patrons, including Sir Hans Sloane, Mary Chudleigh, and Musgrave himself (the map of Lycia). Musgrave appears to have orchestrated this aspect of the publication, to judge from the wording on ‘his’ engraving, ‘suo Pretio (*ut Ceteras fere omnes suâ Auctoritate*) insculpsi [Musgrave] fecit’, my italics. For the edition, see also Musgrave’s letters to Arthur Charlett in Bodleian, MS Ballard 24, esp. fols. 135 and 136; material on the early Devon booktrade with chronological lists of imprints see Ian Maxted’s useful work at <<http://bookhistory.blogspot.com>>.

the most stately organ there'.⁴ Later in life he would contribute the considerable sum of £55 to building works in his old college, probably for finishing off what we now call 'Garden Quad', those residential wings erected to house a new and suitably wealthy category of New College student in the 1680s. Musgrave also donated books to his college's library, as we shall later see.

Musgrave's real focus as a young don, though, was on the 'new science', the fashionable experimentalism associated above all with the 'chymist' Robert Boyle, his assistant Robert Hooke, and the various scientific clubs of Oxford and London that had been springing up since the 1640s. The major event in this respect in Oxford in Musgrave's time was the opening of the Ashmolean Museum in 1683, and it is around that institution that we can see the first phase of Musgrave's career forming.

The Ashmolean Museum (now the building on Broad Street occupied by the History of Science Museum) was a new kind of institution, because it combined on its top floor a permanent, staffed museum based on the collections of the Tradescants as inherited and augmented by Elias Ashmole, on its middle floor a 'School of Natural History' for lecturing and the maintenance of a library, and in its basement a well-equipped laboratory. There was also a room for anatomical work, and this soon took over from the formal Anatomy School next door in the Bodleian's main quadrangle as the chief site of anatomical instruction in the university.

Most importantly for Musgrave, the Ashmolean soon became the formal meeting-place of the Oxford Philosophical Society. Just as the Royal Society of London met in Gresham College, so this copy-cat Oxford society, with which it shared several members,⁵ met within a congenial parent educational institution too. What is significant about the younger institution is that, unlike the Royal Society, the Ashmolean Museum combined research and teaching programmes embedded in a parent academic institution in a manner that directly foreshadows the development of the modern academe. In that respect, at least, the opening of the Ashmolean is actually more significant in the history of science than the foundation of the Royal Society, which merely continued a long trend of gentlemanly clubs.

At the first official meeting of the Oxford Philosophical Society on 26 October 1683, the evergrey John Wallis, Savilian Professor of Geometry—he stuck to his chair, astonishingly, from 1649 to 1703—'was desired . . . to take on him ye trouble of ye Chair'. Meanwhile the young Musgrave, now in his late twenties, was asked 'to take ye Minutes of their Discourses', in other words to act as Secretary. Four large volumes of Musgrave's registers for Philosophical Society business survive today among the Ashmole manuscripts in the Bodleian: two volumes of his own careful minutes, a third serving as an equally careful index to them, and the fourth being the original register of correspondence, a mine of information about early Oxford science.⁶ The Society had been meeting without an agreed constitution or minutes since at least the previous year, as Musgrave himself reported on experiments performed by him involving injecting dogs. These letters were sent to the Royal Society and registered there too.⁷ Musgrave subsequently informed the Oxford society about, or indeed performed before it, distillation of brine, further vivisection of dogs, experiments on digestion 'against ye existence of an *acid ferment* in ye stomach', human dissection, calculations on the proportion of coal to its own ash when consumed, and cancer.⁸ Musgrave's chemico-medical interests very much followed those of Robert Plot, the professor of chemistry and first keeper of the Ashmolean, and indicate the largely chemical interests of the Oxford society. In this period Musgrave evidently moved between Oxford and London, and this was what enabled him to serve as Secretary to not one but both societies.

⁴ Anthony Wood, *Life and Times*, ed. Andrew Clark, 5 vols. (Oxford: Oxford Historical Society, 1891–1900), III, 50.

⁵ So much so that the London society agreed to remit half the subscription fees for members resident in Oxford and of that Society too, provided that they carried out experiments there; Musgrave wrote to thank the Londoners (Thomas Birch, *The History of the Royal Society of London*, 4 vols. (London: A. Millar, 1756–7), IV, 405).

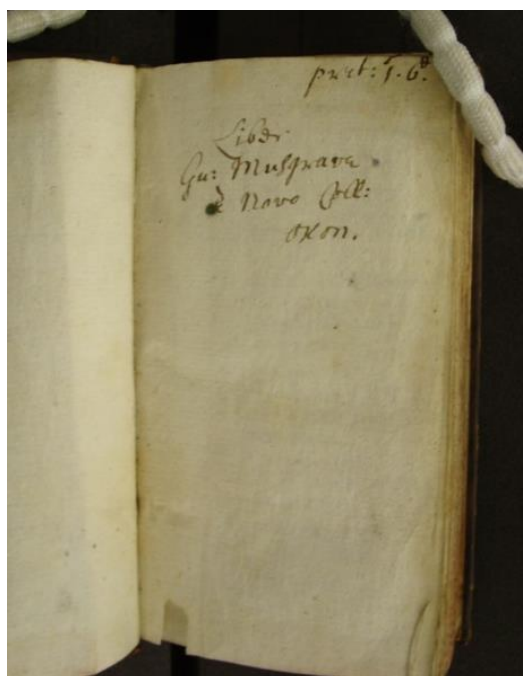
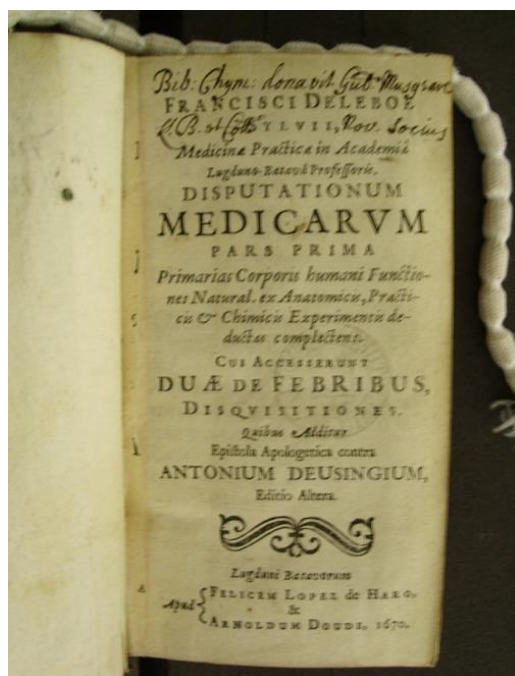
⁶ Bodleian Library, MSS Ashmole 1810-13.

⁷ Letter of 20 February 1682, in *Early Science in Oxford [ESO]*, IV, 13–14.

⁸ *ESO* IV, 30, 76–77, 82, 87–88, 111, 115, 209. The papers on ash survive in Bodleian, MS Ashmole 1813, fols. 359–62.

Musgrave was not the only New College fellow we can detect among the early Oxford Philosophical Society. Among the original attendants, the antiquary Anthony Wood listed not only Musgrave but also Henry Beeston, then Warden of New College. A 1684 list includes Musgrave and Beeston, and with them James Anderton and John Ballard, also both of New College; as Musgrave was appointed the first official secretary for a year, so Ballard was the first treasurer. At least one letter of Ballard to Musgrave was read aloud in the Royal Society itself in this year, in a meeting of 17 December 1684.⁹ As noted, Musgrave experimented on dogs in Oxford, obtaining different results from the classic experiments of Richard Lower; he communicated these to the Royal Society in 1684, saying that his trials had been witnessed by an otherwise unidentified ‘Mr. Paine’ of New College.¹⁰ A much fuller picture of Musgrave’s involvement with early Oxford science can be extracted from the minutes of both the Oxford and the London societies, but for now, it is enough for our purposes to reflect just how closely the metropolitan and Oxford societies were bound together by certain key individuals who moved between the two, most obviously the great John Wallis, but now, we can appreciate, William Musgrave too.

I want to mention here, however, just two more interesting hints concerning Musgrave’s involvement with the early Ashmolean Museum. One is a book donation to the ‘chemical library’, stored in the basement of the new museum, and obviously intended as a practical aid for the chemical experimentation carried out in the laboratory there. Items from this library, today among the Ashmole books in the Bodleian, can be identified because they tend to be marked ‘Lib. Bibl. Chym.’ or ‘Bib^{ca} Chym^{ca}’, and many bear presentation inscriptions too. Twenty-seven volumes from the ‘Bibliotheca Chymica’ have so far been traced—one is signed by Musgrave.¹¹ It is a copy of Franciscus Delaboe Sylvius’s *Disputationum medicarum pars prima* (1670), now shelved as Ashm. 1334. Sylvius (1614–72) was a Dutch physician and chemist and indeed the founder of arguably the first academic laboratory in Europe, in the University of Leiden, so it is a particularly appropriate gift from Musgrave. As the inscriptions on the book show, it was first owned by Musgrave while studying at New College, and then subsequently presented to the chemical library.



Musgrave’s copy of Sylvius’s *Disputationum medicarum pars prima* (1670), Ashm. 1334

⁹ Birch, *History*, IV, 348.

¹⁰ Birch, *History*, IV, 310; but no plausible Paine is listed in Foster, *Alumni Oxonienses*.

¹¹ They are listed in R. T. Gunther, ‘The Chemical Library of the University’, *Bodleian Quarterly Record* 6 (1930), pp. 201–3.

This is far from the only Musgrave book in Oxford today. Not only did he present several of his works to the Bodleian too,¹² but his own substantial library was auctioned in 1725,¹³ and handfuls of his books have through various routes found their ways to Oxford, where they are encountered today principally into the libraries of St John's and Queen's Colleges—although I have spotted at least one more in New College's own collections.¹⁴ Of the various Musgrave books traced around Oxford and elsewhere, most come from his Exeter period, but a few date back to his time at New College, and are all fairly recent works of medicine or natural history, as we might hope.¹⁵

My second hint concerning Musgrave's activities at the early Ashmolean comes from an attack made by John Wallis in 1700 on a 'projector' named Lewis Maidwell, who had proposed setting up an aristocratic academy in Oxford along the lines of various London and continental analogues. The scheme was soon seen off by the academics, who jealously defended their monopoly, but in the course of his rebuttal of Maidwell, Wallis enumerated several earlier Oxford clubs effectually hosted by the university. Wallis also listed a succession of little-known anatomy classes: 'The like [forming clubs] hath been done as to *Anatomy* by Dr. *Musgrave* while he was fellow of *New College* in *Oxford*, who (upon request of some persons agreeing for that end) did with them go through a course of *Anatomy*'.¹⁶ It seems likely that this (presumably subscription-based) course was held in the anatomy room in the Ashmolean. Musgrave is possibly the first New College fellow we can identify who actually demonstrated anatomy in the university.

As for Musgrave's donations to his college library, these came in two separate actions, each representing the different halves of Musgrave's career. First, as is noted in the Library Benefactors' Book he gave to his college the *Philosophical Transactions* for 1683–87 in four volumes, which he had of course edited for some of that period.¹⁷ This probably happened in the very early 1690s, and I suspect this was a gift marking his departure from the college for good. On the same page in the register we note too that the Oxford bookseller Richard Davis also presented the *Philosophical Transactions* for its inception in 1665 up to 1677 at this time, in five volumes, so the two gifts were probably synchronised to provide the college with a complete run of the journal (the gap is explained by the fact that Robert Hooke's *Philosophical Collections* replaced the *Transactions* from 1677 to 1682, as in this period, when he acted as Secretary, he shut down his predecessor's journal and replaced it with his own). Davis's volumes of the *Philosophical Transactions*, incidentally, feature quite

¹² 8° R 35 Med, his *De arthritide symptomatica dissertatio* (Exeter, 1703) is a presentation copy, marked in Musgrave's hand 'Almae Matri Academiae Oxoniensi Pie Grateque DDQ Autor'; exactly the same inscription appears on, 8° R 36 Med, *De arthritide anomalia* (Exeter, 1707), and so both were evidently donated together in or after 1707. 8° C 67 Jur is his presentation copy of *Iulii Vitalis Epitaphium* (Exeter, 1711), marked 'Bibl. Bodl. D. d. Cl. Editor.' 8° Rawl. 621 is Thomas Hearne's copy with his notes; and Douce M 612 is his copy of parts one and two of *Antiquitates*.

¹³ *A Catalogue of books, in physick, history, classical learning, &c. ... Being the library of the late learned Dr. Musgrave* (Exon: Andrew Brice, 1725), an octavo of 54 pages (copy at BL S.C. 222(8)).

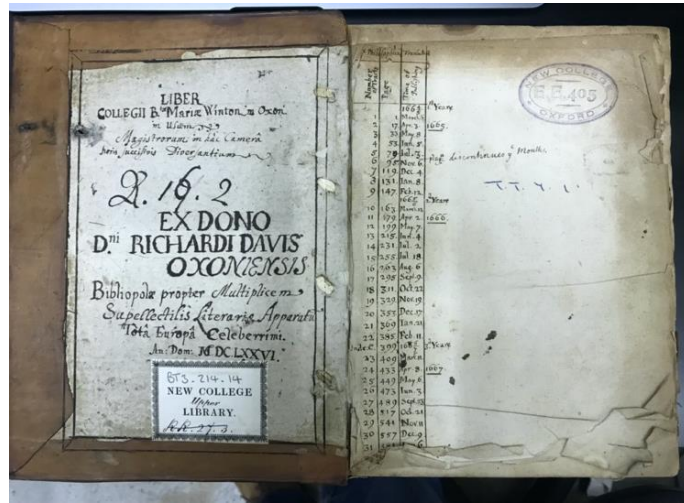
¹⁴ It is Johannes Verwey's textbook *Thesaurus cultae Latinitatis* (Gouda, 1701), at BT1.66.5, with Musgrave's inscription 'E libris Guilh: Musgrove Medici Exoniensis Junij 12. 1707'; it probably came to the College after the posthumous dispersal of Musgrave's library.

¹⁵ Jesus College, Fellows' Library, M.5.16 Gall., is a copy of Gerard Boate, *Ireland's Naturall History* (London, 1652), signed 'Liber Gu: Musgrave è Coll. Novo Oxon.'; Queen's College Library, Tunnel, HS.b.228, Thomas Bartholinus, *De pulmonum substantia et motu diatribe* with Marcellus Malpighius, *De pulmonibus* as an appendix (Leiden, 1672), is signed 'Liber Gu: Musgrave è Novo Coll: Oxon.'; and in the same library, Tunnel, NN.q.82, John Ray, *Catalogus plantarum Anglia* (London, 1677), is signed 'Liber Gu: Musgrave è Coll: Novo Oxon.' (The various Musgrave books in Queen's fall within the books received from Theophilus Metcalfe (1690–1757).) In the Huntington Library in California there is William Cole, *De secretione animali cogitata* (Oxford, 1674), call no. 3543, inscribed 'Liber Gu: Musgrave è Novo Coll: Oxon.'

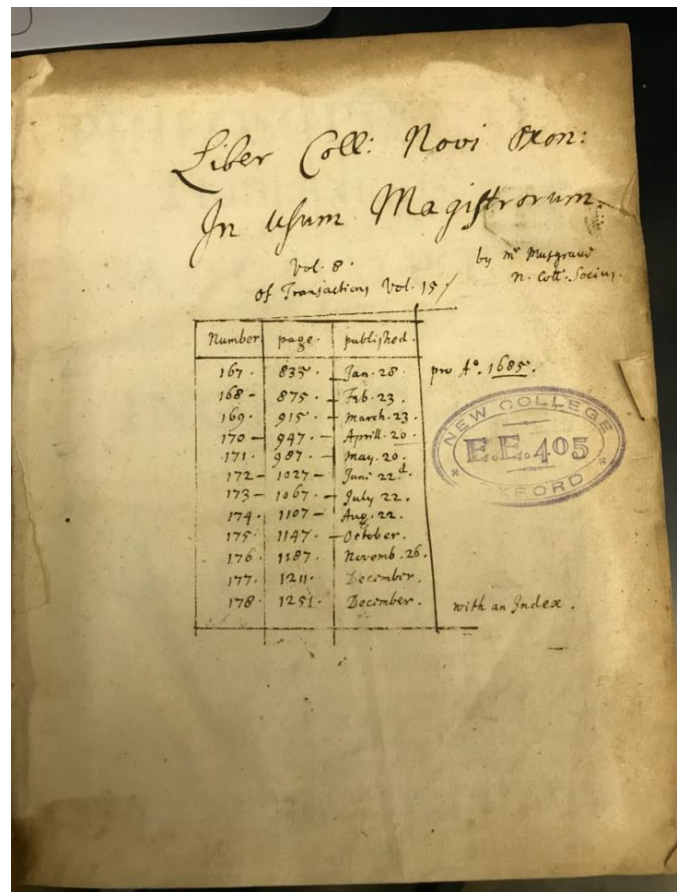
¹⁶ W. T. Jackson, 'Dr. Wallis' Letter Against Mr. Maidwell, 1700', in *Collectanea: First Series*, ed. C. R. L. Fletcher (Oxford: Oxford Historical Society, 1885), pp. 269–337, at p. 316, taken from Wallis's autograph, in Bodleian, MS Savile 57.

¹⁷ New College Library, Library Benefactors' Register, p. 140. Thus BT3.214.14–18, with elaborate inscriptions for the first four volumes, and then a rougher one in a different hand for the fifth volume, are from Davis; and the sixth to ninth in the college's series (BT3.214.19–20; BT2.215.1–2) are from Musgrave, but only the eighth, for 1685, printed in Oxford, has an inscription marking it as from Musgrave, and its printed preface to Lord Brooke is signed by Musgrave as editor (BT3.215.1), and the ninth, for 1686, has a manuscript donation date of 8 February 1690, but no donor's name (BT3.215.2). The positioning in the Benefactors' Register suggests a donation date of 1690–92.

elaborate donation inscriptions, and a librarian or reader perhaps in the 1690s has also gone through each volume, including the Musgrave volumes, adding a careful manuscript contents table to each.



A volume of the *Philosophical Transactions* donated to the college library by the Oxford bookseller Richard Davis New College Library, Oxford, BT3.214.14—note the manuscript contents table too



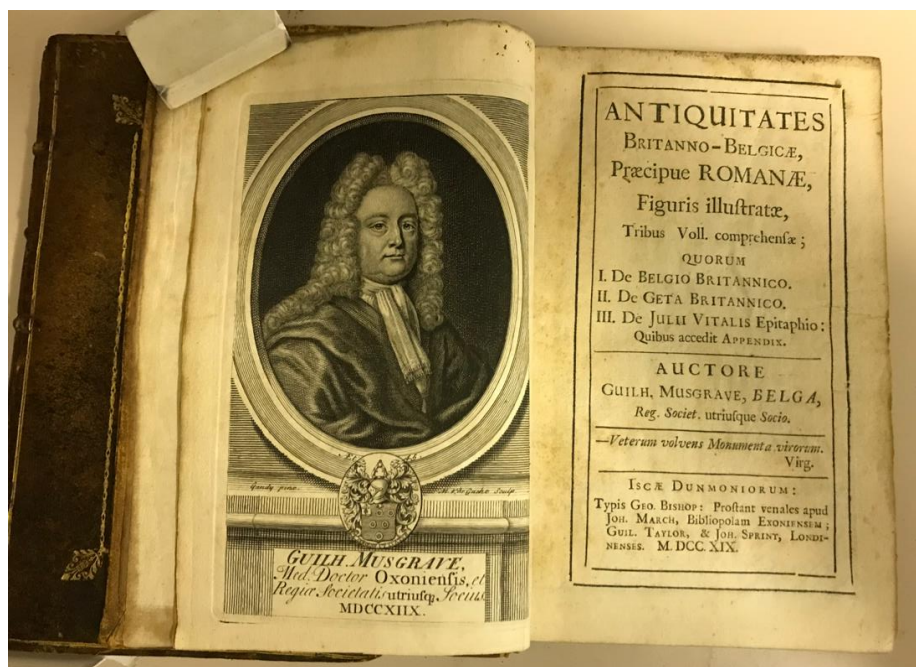
A volume of the *Philosophical Transactions* donated to the college library by Musgrave New College Library, Oxford, BT3.215.1—note the manuscript contents table in the same hand as the prior picture

Much later, Musgrave presented the college with the first three volumes of his magnum opus, the *Antiquitates*, in 1720, and as the college’s copy of the fourth part is in identical binding, it is obvious

that this came directly from Musgrave, or possibly his executors, too. Hopefully in some future Notes I shall be able to say something more both about Musgrave's earlier experimental researches in the 1680s, and also his long correspondence from Exeter in later life with his old Oxford friends on their shared antiquarian and archaeological pursuits.



The college's four volumes of Musgrave's *Antiquitates* in uniform bindings



Title-page with facing engraved portrait from the first volume of the *Antiquitates*

William Poole
Fellow Librarian
New College, Oxford