## THE WORKS OF MICHEL'ANGELO GRIMA

(1731 - 1798)

# A bibliography with summaries and notes

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The name of Michel'Angelo Grima is familiar to most members of the Maltese medical profession. However, beyond knowing that he was an accomplished surgeon and that he had proposed the endto-end anastomosis of the human intestines by a continuous spiral suture, none of them have compiled a full list of his literary works (Debono, 1945; Cassar Pullicino, 1949; Psaila, 1972). This is not surprising in view of the fact that a complete collection of his writings has not been available in Malta.

The Royal Malta Library at Valletta possesses seven of Grima's works; a few other publications found their way to the Library of the Royal University of Malta at Msida.

I have been trying to fill the gaps and after an intensive and extensive search in libraries in Europe and North America for the past five years I have now succeeded in tracing the whereabouts of several of the missing works and to discover others whose existence had been unknown to us. secured photocopies and microfilms of them for the Melitensia Collection of the Library of the Royal University of Malta and have indicated the libraries abroad possessing Grima's publications manuscripts.

With the exception of the following

five works, that have probably remained in manuscript form and that have so far eluded my search, his other writings are now available at the two above mentioned libraries in Malta:

- 1. De cranii repercussione, 1759-60.
- 2. De fistula subinferiori ora orbitae oculi dextri cum carie ossis maxillae superiorae duorum extremorum dentium molarium feliciter sanata. 1758.
- 3. De ingenti tumore in capitis regione laeva, 1758.
- 4. Sopra l'origine, progressi e vantaggi della chirurgia, 1764.
- 5. Oration (title unknown) delivered at the inauguration of the school for barber-surgeons at the Holy Infirmary, 1775.

In this bibliography Grima's works are listed in chronological order. The most fruitful phase of Grima's original research and literary activity coincides with his stay in Florence and Paris (1750-63). In fact seven of his contributions belong to this span of thirteen years in Italy and France prior to his return to Malta on the 9th September 1763.

The other eight works saw the light during the period of thirty-four years from 1764 to his death in 1798; yet four

of them were the results of experiences gained and cases observed abroad prior to 1764 either at Santa Maria Nuova hospital in Florence or at Paris or at Cassel in Germany. The rest consists of two lectures delivered at the Holy Infirmary. Valletta — the contents of which are unknown — and two treatises on human anatomy. One is tempted to speculate why the "Malta period" was so relatively unproductive in spite of its long duration and its concurrence with Grima's most mature and experienced years. Were his time and energy so much taken up with routine lecturing and surgery at the Holy Infirmary that he had no chance of carrying out any fresh original work? If he did have such a chance, what prevented him from publishing the results of his investigations? Were facilities for experimental research non-existent in Malta? Did Grima become so disheartened through the contretemps and professional rivalries that marked his career Malta from the seventies onwards?

Of his contributions, ten are written in Italian, three in Latin and two in French. Three were published in Florence, another three in Paris, two in Venice, and one each in London and Malta. It is not known whether the remaining five were ever published and, if so, where.

I have provided summaries and notes about each work. The main milestones in Grima's professional life have also been added as a backcloth to his literary activities.

#### Biographical milestones

- 1731 (May) Michel'Angelo Grima born (date and year uncertain)
- 1743-50. Studied surgery at the Holy Infirmary, Valletta.
- 1750 (10th May). Left Malta for Florence to study at the hospital of Santa Maria Nuova
- 1754 Obtained doctorate in philosophy and medicine of the University of Pisa.

Dissector at the hospital of Santa Maria Nuova.

Published Delle osservazioni fatte

- sopra il corpo vivente d'alcuni animali intorno le ferite penetranvi la gran cavita dell'addome in Florence.
- 1756 Read paper entitled Sulla sensibilità dei tendini at Florence.

  Read paper (5th October) on the spiral suture of the intestines at Florence which he published in 1760 (q.v.).
- 1758 (2nd October). Approved as surgeon by the Collegio dell'Arte Medica of Florence.

  Wrote Historiae atque observationes tres, etc.
- 1759 (March). In Paris to continue his studies.
- 1760 Left Paris to join the French forces as a surgeon for two years during the Seven Years War. Worked in hospital at Cassel (Germany). Published Del nuovo e sicuro metodo di cucire gl'intestini, etc., in Paris.

  Published Memoire sur la sensibilità des tendons in Paris.

  Wrote De cranii repercussione 1759-60
- 1761 Published Reflexions sur la memoire sur la taille laterale de M. Bromfeild in Paris; and Riflessioni del Sig. Michelangelo Grima sopra il taglio laterale che per estrarre la pietra della vesica orinaria pratica il Signor Guglielmo Bromfeild, in Florence.
- 1763 (9th September). Returns to Malta at thirty-two years of age after an absence of thirteen years. (26th September). Appointed Senior Surgeon at the Holy Infirmary, Valletta. Acting Lecturer in Anatomy and Surgery. (27th November). Appointed Lec
  - turer in Anatomy and Surgery. (3rd December). Granted licence to practice medicine in Malta.
- 1764 (10th January). Gave lecture Sopra l'origine, progressi e vantaggi della chirurgia at the Holy Infirmary. (20th July). Appointed member of

the Protomedical College. Published Due relazioni medicoanatomiche in Malta

- 1771 (29th May). Nominated Lecturer in Anatomy and Surgery at the newly founded University of Malta.
- 1773 (12th February). Removed from the lectureship but re-instated on the 18th. Removed again after the 15th June.

Published De poplitis aneurismate in London and the Della medicina traumatica in Florence.

- 1775 Delivered oration at the inauguration of the School of Barber-surgeons at the Holy Infirmary.
- 1776 Re-instated as Lecturer. Published Della sensibilità dei tendini.
- 1781 Published Instituzioni d'anatomia in Venice.
- 1785 (perhaps earlier). Dictated Trattato della sarcologia, angiologia e nervologia.
- 1797 (2nd April). Retired from lectureship and hospital service.
- 1798 (25th August). Died.

## **Bibliography**

1. DELLE OSSERVAZIONI **FATTE** SOPRA ILCORPO VIVENTE D'ALCUNI ANIMALI INTORNO LE FERITE PENETRANTI LACAVITA' DELL'ADDOME. GRAN Firenze, 1754 (Novelle letterarie, No. 29, 19th July, p. 449).

Libraries. Royal University of Malta Library, Msida (Photostat copy). Biblioteca Nazionale Centrale, Florence.

Summary. M.A. Grima records his observations on the effects of the experimental removal of the spleen in the dog. The work was carried out in 1754 while he was at the Ospedale di Santa Maria Nuova at Florence. "Many other excellent authors" had performed the operation in the same species of animal prior to him. He did not ligature the splenic blood vessels. The dog survived the operation.

Grima concludes that (a) the spleen is not necessary for the maintenance of life in animals and human beings; (b) injuries of the spleen are not very dangerous or fatal; (c) the organ may be removed surgically in human beings when it protrudes from the abdomen in open injuries of this cavity.

He suggests the name of "splenotomy" for this operation.

Notes. In later years (1773) Grima became more cautious in his pronouncements regarding the gravity of injuries of the spleen in human beings; in fact he realised that "penetrating wounds (of the abdomen) with injury of this viscus may be dangerous". While discussing the treatment of injuries of the spleen in his Della medicina traumatica (1773), he does not advocate the removal of the organ but recommends repeated bleedings and anodyne fomentations.

The Ospedale di Santa Maria Nuova of Florence was founded by the father of Beatrice, Dante Alighieri's love, in 1287. By the 14th century this institution had earned a high reputation for its administrative arrangements. In the 18th century several Maltese surgeons went to this hospital to pursue their studies such as Gabriele Henin, who in 1723 was Anatomy at the Teacher in Infirmary, Valletta, and Michel'Angelo Magri who was dissector at Santa Maria Nuova in 1740 and later lecturer in anatomy at the Regio Ospedale of Messina.

Grima studied anatomy and surgery at Santa Maria Nuova where he also filled the post of "public dissector" under the direction of the physician Antonio Cocchi (1695-1758). Cocchi, who had studied in France, Holland and England, emphasised the importance of clinical history-taking and of trusting in the natural healing powers of the patient (Grima, 1781; Nespoli, 1831; Treccani, 1929 a; Risely, 1962).

As Grima himself stated, the experimental removal of the spleen in the dog had been carried out many years previously. In fact the idea of performing

the operation in animals and men dates since at least the time of Pliny (A.D. 23-79) while during the sixteenth century splenectomy was performed on human beings in Turkey and in Palermo. In Great Britain the operation was revived by George Thomson (1619-77) in 1655-56. Thereafter it became a popular operation at public and private meetings of physicians in various parts of Europe (Webster, 1971).

- 2. HISTORIAE ATQUE OBSERVA-TIONES TRES MEDICO-CHIRUR-GICAE SINGULARISSIMAE PER MICHAELEM ANGELUM GRIMIUM EXARATE Ms. 1758.
  - (a) De mamma maxima mole facta feliciter extirpata atque sanata. With three plates.
  - (b) De fistula subinferiori ora orbitae oculi dextri cum carie ossis maxillae superiorae duorum extremorum dentium feliciter sanata.
  - (c) De ingenti tumore in capit's regione laeva. With three coloured plates.

Libraries. De mamma is at the Royal University of Malta Library, Msida (Photostat copy). The original Ms. (No. 226, ARC Carton No. 44) is at the Bibliotheque de l'Academie Nationale de Medecine, Paris. De fistula and De ingenti tumore have not been traced.

Summary. De mamma is a short clinical description of a new growth of the right breast in a peasant woman and an account of its surgical removal and of its subsequent dissection. The operation was performed in 1758 at the hospital of Santa Maria Nuova of Florence. The wound healed "perfectly" and the patient left hospital after six weeks.

Notes. The manuscript forms part of the Archives of the Academie Royale de Chirurgie now housed at the above named Bibliotheque. The three plates show the breast after removal and its post-opera-

tive dissection. The drawing is rather crude.

3. DE CRANII REPERCUSSIONE. 1759-60?

Libraries. Not traced.

Summary. Contents unknown.

Notes. We know of the existence of this work only from a footnote in the author's Della medicina traumatica (Firenze, 1773, pp. 82 and 92). It was written in Latin and also in French and was sent to the Royal Academy of Surgery of Paris. He was awarded "the usual gold medal worth five hundred French lire as was announced in the journals of that time".

This work has been ascribed to the year 1756 (Cassar Pullicino, 1949). It seems, however, that this year needs revising. In fact the prize awarded to Grima for this treatise was in connection with a competition announced in the Journal des Scavans for December 1759 (p. 878) in the following words:- "L'Academie Royale de Chirurgie propose pour le Prix de l'anne 1761 le sujet suivant:-Etablir la theorie des contre-coupsi dans les lesions de la Tete et les consequences pratiques qu'un peut en tirer . . . . Toutes personnes de quelque qualitè et pays qu'elles soient paurront aspirer au Prix: on n'en excepte que les Membres de l'Academie". The thesis had to be written in French or in Latin and submitted under a pseudonym. It had to reach the Secretary of the Academy not later than the last day of December 1760. The result of the competition was to be announced "fifteen days after Easter" in 1761. From these data we must deduce that the work of Grima must have been written between December 1759 and December 1760 and that, if it was published, it could not have been printed earlier than 1761.

4. DEL NUOVO E SICURO METODO
DI CUCIRE GL'INTESTINI ALLORA QUANDO IN OCCASIONE DI
FERITE O DI ALTRO VENGAN
OFFESE OD ALLONTANATI DALLA LORO NATURALE CONTI-

GUITA'. Parigi, 1760. pp. viii & 30 (in  $4^{\circ}$ ).

Libraries. Royal Malta Library, Valletta; Facultè de Medecine, Paris; L'brary of the Surgeon General's Office, U.S. Army, Washington; Bibliotheque National, Department des Imprimes Paris.

Summary. This dissertation was originally presented as a paper to the Sacra Accademia Fiorentina on the 5th October 1756.

It is an account of six experimental operations performed on dogs between the 5th May 1754 and the 20th May 1755.

Grima cut off a portion of the intestine and joined the free loops in an end-to-end anastomosis by means of a spiral suture. He checked the results of his work by submitting the dogs to a post-mortem examination and found that he had obtained "a good and stable union of the intestines". He suggests the performance of this operation in man in cases of of open injuries of the abdomen especially where there is prolapse and gangrene of the bowels and proposes the term "spiral suture" (cucitura spirale) for the type of stitching he experimented with.

Notes: As early as the 4th century B.C., Praxagoras, a physician of the Alexandrian School, had recommended the opening of the abdomen in intestinal obstruction, removal of the affected portions of the bowels and union of the two ends by means of suture (Osler, 1943).

Grima's work came in for considerable criticism in Malta in a contemporary pamphlet printed in Messina in 1762. It is stated in this brochure, ascribed to the Maltese doctors G. Azzopardi and G. Bruno, that Grima was not the originator of the spiral suture as this type of stitching had been advocated by surgeons prior to Grima. A case of suturing of the bowels is recorded as having been carried out by the Maltese surgeon Michele Grillet at the Holy Infirmary of Valletta in 1761 in a boy of eleven years (Lettera avologetica, 1762a).

Grima's book had quite a favourable reception abroad. A french reviewer stated: "The author, who appears to be

well versed in all aspects of surgery, discusses in a very extensive and wellthought manner the topic of intestinal suturing. After many successful experiments of sewing the intestines in animals and after several observations made on human beings, he decided in favour of this kind of suturing. The advantages of this method, which appeared to have been almost ignored by the greatest surgeons. are here brought to light. The author regards this operation to be very useful and preferable to all other methods of treating wounds of the lower abdomen and of the intestines. M. Grima bases his conclusions on repeated experiences and on solid arguments. In our opinion this dissertation is well written and is a testimony of the erudition of the author and of his talents for his profession" (Le iournal de medecine, 1760).

I do not know whether G.Ima himself ever performed the operation on human beings but one of his pupils, Raffaello Bordanali, is said to have done so. This is asserted by Dr. G.F. Inglott who wrote: "Using the method of his master, Raffaello Bordanali has saved the lives of many of his fellow citizens. The method consists in cutting off the torn and combused portions of the intestine and then suturing the healthy sections with a spiral stitch" (Inglott, 1907).

5. MEMOIRE SUR LA SENSIBILITE' DES TENDONS. Paris, 1760. pp. iii & 29 (in 120).

Libraries. Royal Malta Library, Valletta; Faculte de Medecine, Paris; Bibliotheque Nationale, Departement des Imprimes, Paris.

Summary. Grima describes several experiments of a physiological kind performed by him on living animals — three dogs, two lambs and a number of cockerels and pigeons — to show that tendens are sensitive to pain. These experiments were carried out in 1755 during his stay in Florence. He also reports the case of a patient whose tendons of the right big toe had become exposed through disease and who felt pain when these

tendons were touched with a forceps and with a mass of threads soaked in alcohol

He describes the gross anatomical structure of tendons, their blood and nerve supply based on the findings of his own dissections of muscles and tendons removed from the cadaver. He likewise discusses the motor functions of tendons.

Notes. This dissertation was delivered on the 22nd April 1756 at a meeting of the Accademia degli Apatisti of Florence. It seems to have been conceived to confute a certain Rev. Fr. Cesare Pozzi from Bologna who held that tendons were insensitive to pain. Grima indulges in sarcastic criticism of Pozzi apparently inspired by professional rivalries between Florence and Bologna.

Grima translated the original Italian text into French as an exercise "to improve more and more his knowledge of this beautiful language" and dedicated it to Bailiff Louis (Gabriel de Tasse) de Fraulay (Froullay) as evidence of "the progress of his studies".

The Bailiff (1684-1766) was a Knight Grand Cross of the Order of St. John of Jerusalem and Ambassador Extraordinary of the Order to the Courts of Paris and of Prussia. Apart from having had a brilliant naval and diplomatic career, the Bailiff also took an active interest in the literary life of his times. He was the friend and defender of Francois Marie Arouet de Voltalire and of Jean Jacques Rousseau (Engel, 1972).

In a review of Grima's work published in Le journal de medecine, chirurgie, pharmacie (1760, vol. 13, p. 375) the writer commented that "Grima has established by his experiments the existence of the sensibility of tendons. He quotes excerpts from the experiences of M. Fabrini, M. Laghi, M. Lecat, etc. and several other physicians of Europe. He seems, above all, to have had in mind the eulogy of his (Florentine) compatriots".

 REFLEXIONS SUR LA MEMOIRE SUR LA TAILLE LATERALE DE BROMFIELD (sic). Paris, 1761 (Journal de medecine, chirurgie, et pharmacie, Vol. XIV, Fevrier, pp. 161-71).

Libraries: Royal University of Malta Library, Msida (Photostat copy); Universitè de Toulouse Bibliotheque, Toulouse; Universitè de Bordeaux Bibliotheque, Bordeaux

Summary. Grima describes in detail the operation performed by him on the cadaver with the "double gorgeret", an instrument invented by William Bromfeild senior (1713-92) for the extraction of vesical stones by the lateral approach. The instruments that Grima used belonged to Bromfeild himself, having been lent to Grima by Bromfeild's elder son. William Herict, who was an M.D. of Padua (British Medical Journal, 1946 a). Grima compares Bromfeild's instrument and method with William Cheselden's lithotome and operating procedure which he had seen carried out many times in Malta by Michele Grillet, Maltese lithotomist, and at the Hotel Dieu of Paris by Angiolo Nannoni (1715-90) "one of the foremost surgeons of Florence and of the whole of Italy".

Grima concludes that Bromfeild's instrument and technique represented an improved medification of Cheselden's method.

Notes, Urinary lithiasis was common in the 17th and 18th centuries. Diagnosis of bladder stone was confirmed by "searching" which consisted in the introduction of a catheter in the viscus through the urethra and "feeling" the stone.

While attempts were made to treat this ailment by means of empirical drugs which were supposed to dissolve the stone inside the bladder (lithontriptics), surgical extraction of vesical calculi was the standard remedy. The operation, however, was attended with such dangers as bleeding and infection (Viseltear, 1968).

William Bromfeild had published a short work in Latin on lithotomy in Florence in 1761 under the title of Observationes ad lithotomiam attinentes aliaque chirurgice monumenta (British Medical Journal, 1946 b). Perhaps it was this publication that prompted Grima to

write his paper.

Wi'liam Bromfeild was surgeon to St. George's Hospital of London, to the Prince of Wales and the Dowager Princess and later to Queen Charlotte, wife of George III. In 1746 he founded the Lock Hospital in the West End of London. His main contribution to surgical literature is the Chirurgical Observations and Cases published in 1773 — the same year of Grima's publication Della medicina traumatica (British Medical Journal, 1946 c).

William Cheselden (1688-1752) was surgeon to St. Thomas's Hospital and one of the best known lithotom sts of his time. He abandoned the suprapubic route in favour of the lateral perineal approach in 1727 reducing to 17% the mortality of the operation which was named after him (Guthrie, 1947). This operation with minor modifications of technique and instruments, remained essentially changed for the next one hundred and fifty years until it was superseded by lithotrity in the first half of the 19th century and by the re-introduction of suprapubic cysto-lithotomy in the last quarter of the century when this operation was rendered a safe procedure thanks to the advances registered in anaesthesia and antiseps's (Batty Shaw, 1970).

Angiolo Nannoni (1715-90), surgeon at the Santa Maria Nuova hospital of Florence, gained distinction for his method of cleaning wounds with tepid water and then applying a dry dressing thus doing away with the contemporary practice of covering wounds with oils and balsams (Treccani, 1929 b).

Michele Grillet was the son of Giuseppe, also a surgeon. He has been described by his contemporaries as "a famous lithotomist and able surgeon". He was on the staff of the Holy Infirmary of Valletta and in 1755 was appointed surgeon to the Slave Prison from which post he retired in 1791 (Arch. 1189, 1192, 1194, 1196, 1724, 1755, RML; Lettera apologetica, 1762 b).

The Hotel Dieu of Paris, in existence since at least 829 A.D., was rebuilt after being burned down in 1772. At the time

of Grima, conditions in this hospital were appalling. The number of beds (1400) was unwieldy and overcrowding was extreme. The operation room contained those "being operated on, those who will be operated upon and those who have already been operated upon". Mortality among all patients was two out of nine. Substantial improvements were effected after the French Revolution (1789) (Ackerknecht, 1967).

7. RIFLESSIONI DEL SIG. MICHELANGELO GRIMA SOPRA IL TAGLIO
LATERALE CHE PER ESTRARRE
LA PIETRA DELLA VESICA
ORINARIA PRATICA IL SIGNOR
GUGLIELMO BROMFEILD, Firenze,
1761 (Estratto dal Giornale Francese
di Medicina, Chirurgia, Farmacia,
etc. del Mese di Febbraio, Edit. A.
Bonducci), pp. 68-79 (in 4°):

Libraries. Royal University of Malta Library, Msida (Photostat copy); British Museum, London; Faculte' de Medecine, Paris (6e).

Summary. See REFLEXIONS SUR LA MEMOIRE SUR LA TAILLE LATERALE DE M. BROMFIELD (sic), Paris, 1761. Notes. This work is an Italian translation of the abovenamed French publication.

8. DUE RELAZIONI MEDICO-ANATO-MICHE, Malta, 1764, p. 11 (in 8°).

Libraries. Royal Malta Library, Valletta. Summary. This is a report of the findings in two necropsies carried out on two ladies of the Florentine aristocracy on the 19th October 1756 and the 2nd May 1757 respectively. In the first case there was an abscess of the left ovary bursting into the intestine and urinary bladder; in the second instance, an abscess in the right iliac fossa involving the bowels. The gall bladder contained forty-four stones. Notes. This is the only work of Grima to be published in Malta. In his days there was only one printing press in the Island which belonged to the Government. Permssion to print and publish had to be obtained from the Grand Master after submitting the manuscript for his approval. Grima's application for the necessary permit and the Grand Master's fiat to have the work printed are dated 3rd January 1764 (Arch. 2067, RML). An entry in the journal of the Order's printing press under the same date refers to the expenses Grima incurred for its printing (Arch. 2044, RML).

9. SOPRA L'ORIGINE, PROGRESSI E VANTAGGI DELLA CHIRURGIA. Published? Where? 1764.

Libraries. Not traced.

Summary. Contents unknown.

Notes. This is the title of a public lecture delivered on the 10th January 1764 in the Ward for the Wounded at the Holy Infirmary, Valletta (Ms. 14, RML). It may have remained in manuscript form and has not been traced.

The cost of printing one hundred invitation cards for admission to this lecture is recorded in the ledger of the printing press of the Order under the date of the 3rd January 1764 (Arch. 2044, RML).

10. DE POPLITIS ANEURISMATE, Londini, 1773, pp. 16 (in 8°).

Libraries. Royal Malta Library, Valletta. Summary, In this short work Grima discusses the aetiology, symptomatology, classification and treatment of cases of popliteal aneurysms observed by him at the Hospital of Santa Maria Nuova in the mid-eighteenth century. He reviews the pertinent literature on the subject.

Notes. The book is dedicated to Fra Bernardin-Hyppolite de Marbeuf, Prior of Aquitaine, Infirmarian (22nd October 1746-29th November 1748) and later Grand Hospitaller (16th November 1772-19th October 1774) of the Holy Infirmary, Valletta.

Although, according to the title page, this book was published in London, I have not yet been able to ascertain that it was actually published there. The British Museum possesses no copy.

No evidence has been forthcoming that Grima had ever been to Great Britain though as early as the 30th June 1753, while studying surgery at Florence, he had expressed the wish to be granted

a bursary by the Order of St. John at Malta to enable him to spend two years in England to continue his studies there (Ms. 146, RML). Two years later, on the 25th June 1755, he was hoping to settle as a surgeon in Rome or at the Neapolitan Court or, in the last resort, in England (Ms. 22, RML).

By 1761 he had become acquainted with Dr. William Heriot Bromfeild who, as already stated, had lent Grima the instruments which his "famous father uses to extract stones from the urmary bladder" (Grima, 1761). Dr. W.H. Bromfeild died in 1762 but Grima may have had the occasion to establish useful contacts in England through this acquaintance which later on may have helped him to publish his book on popliteal aneurysm in London.

It has been stated that one of Grima's relatives, Fr. Alfonso Brincat, a priest at the Holy Infirmary, had spent some time in England (Psaila, 1972). The document quoted in support of this assertion (Arch. 635, RML), however, refers to a stay of Brincat in Hungary and not in England.

11. DELLA MEDICINA TRAUMATICA ALTRIMENTI DETTA VULNE-RARIA Firenze, 1773. xii & 240 pp; 20 engravings including frontispiece (in 4°).

Libraries. Royal Malta Library, Valletta; Royal University of Malta Library, Msida.

Summary, This book deals with the surgical treatment of fire-arm wounds involving the soft tissues and bones. Grima discusses the use and abuse of amputations and of trephining of the skull.

He expresses his admiration for Ambroise Pare' for debunking the "ridiculous opinion" that fire-arm wounds were per se poisonous and for rendering the method of treating them more simple for the surgeon and less painful and distressing for the patient.

The work ends with twenty-four clinical case-histories, illustrated with engraved plates, dealing with the treatment of injuries of the skull, spine,

limbs and abdomen.

Notes. This treatise is based not only on Gr'ma's knowledge of the literature of military surgery but also on his own experience gained during his service with the French forces at the army hospital at Cassel during the Seven Years War.

It was published for the benefit of his surgical students, whom he taught at the Holy Infirmary at Valletta, to gain the necessary proficiency for filling surgical posts in military hospitals. In fact he considered war as being "the great school not only of traumatic medicine but of the whole of medicine".

The work is dedicated to His Excellency Fra Francisco Guedes de Magalhaens, Priory of Portugal, Vice Chancellor of the Order of St. John of Jerusalem, Bailiff of the Eagle, Lieutenant of the Grand Master during the illness of Grand Master Em. Pinto (1772), Grand Cross and Ambassador of the Order to the King of Naples (1776). He died in Malta and is buried in the Oratory of St. John's Cathedral, Valletta.

12. ORATION DELIVERED AT THE INAUGURATION OF THE SCHOOL OF BARBER-SURGEONS AT THE HOLY INFIRMARY (Title unknown), 1775.

Libraries. Not traced.
Summary. Contents unknown.

Notes. This lecture was delivered in Italian on the 11th March 1775 at the Library of the Holy Infirmary in the presence of a large audience which included the *Protomedico* (Chief Government Medical Officer), the Infirmarian (a French knight who was responsible for the administration of the Holy Infirmary) and Ba'liff Clemente Resseguier who had founded a lectureship in surgery at the same hospital (Ms. 1146, RML). See also under Della sensibilita' dei tendini.

13. DELLA SENSIBILITA' DEI TENDINI. DISSERTAZIONE DEL DOTTORE MICHEL ANGIOLO GRIMA. COLL'AGGIUNTA DI ALTRE LETTERE SOPRA IL MEDESIMO

ARGOMENTO DI ALTRI AUTORI. Venezia, 1776, pp. 42 (Nuova raccolta d'opuscoli scientifici e filologici, Tomo ventesimonono, appresso Simone Occhi, Venezia, pp. 1-42) (in 160).

Libraries. Royal University of Malta Library, Msida. Photostat copy and microfilm P.S. 710685/247 a.28 (incomplete); National Library of Medicine, Bethesda, Maryland, USA; Library of the Surgeon General's Office, U.S. Army, Washington; British Museum, London.

Summary. See under French text.

Notes. It is not known why this work was published twenty years after it was delivered as a lecture in 1756 and after having been published in French as early as 1760. Perhaps Grima decided to publish it again as an expression of gratitude towards. His Excellency the Bailiff Clemente Resseguier, General of the Galleys of the Order of St. John (1772-74) and Commander of Marseilles.

This Bailiff was renowned for his "knowledge of all the sciences and arts" and founded a Lectureship in Surgery at the Holy Infirmary of Valletta in 1775 for which purpose he deposited the sum of two thousand scudi with the Government Treasury. The interests accruing therefrom were to be used to remunerate the lecturer. He reserved the right to appoint the lecturer himself. After his death the choice was to devolve on the reigning Grand Master.

The a'tre lettere mentioned in the t'tle of this work are laudatory comments from Monsieur Lecat (or Le Cat), Primo Professore della Francia and from Giambattista Bianchi, Primo Professore d'Anatomia in Torino.

14. INSTITUZIONI D'ANATOMIA, Venezia, 1781, pp. 426 (in 80).

Libraries. Royal University of Malta Library, Msida; Royal Malta Library, Valletta.

Summary. This book consists of the anatomy lectures which Grima delivered to his students at the Holy Infirmary. He

gives a short account of the teaching of anatomy in Europe with special reference to its development in the School of Anatomy and Surgery of Malta and a detailed description of the bones, ligaments and joints of the human body.

Notes. The work is dedicated to Grand Master Em. de Rohan. Grima solicits "the continuation of the most worthy sovereign protection of His Most Serene Highness".

The book was published in Venice after being submitted to the General Inquisitor of the Holy Office who gave his permission for its printing as containing nothing against morality and the Catholic Faith.

15 TRATTATO DELLA SARCOLOGIA, ANGIOLOGIA E NERVOLOGIA Manuscript, fols. 260, 1785.

Libraries. Royal Malta Library, Valletta. Ms. 1203

Summary. This is a description of the muscles, arteries, veins and nerves of the human body.

Notes. The manuscript appears to be the notes, written by a medical student, of M.A. Grima's lectures. It is dated 19th October 1785. The year "1785" is superimposed on what seems to be "1765".

The manuscript passed through the hands of at least three owners. Their names appear on the title page as follows:- (a) Josephus et Emanuel Gaucii (?) written at the top on the right hand corner. These names are cancelled and scribb'ed over and, therefore, cannot be made out with certainty as they are almost illegible; (b) Michel Angelus Mittius (Mizzi), from Gozo, occupies the middle part of the lower third; and (c) Cac. Uff. M.A.M. Mizzi is hand-stamped on the right hand side of the upper third.

It was presented by Cav. Uff. M.A.M. Mizzi on the 24th October 1898 to the Library of the Royal University of Malta where it was preserved until the 4th June 1935 when it was transferred to the Royal Malta Library, Valletta.

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#### References

ACKERKNECHT, E.H. Medicine at the Parish Hospital 1794-1848, Baltimore, 1967, pp.16-20.

ARCHIVES. 1189, fol., 288; Arch. 1194, fol., 17; Arch. 1196, fol., 104; Arch. 1724, fol., 131; Arch. 1755, iol., 46; Arch. 1192, fol., 185, Royal Malta Library.

ARCHIVES. 2067, fol., 515, RML.

ARCHIVES. 2044, fol., 9 t, RML.

ARCHIVES. 635, fol., 8, RML.

AZZOPARDI, G. & BRUNO, G., (a), Lettera apologetica, Messina, 1762, p.21.

Ioidam, (b), p.13.

BATTY SHAW, A. The Norwich School of Lithotomy, Medical History, 1970, 14, 228, 251 & 252.

British Medical Journal, (a), 1946, 2, 16. Ibidem, (b).

Ibidem, (c).

CASSAR PULLICINO, G. Michel'Angelo Grima, Chirurgo maltese del settecento, Rivista di storia delle scienze mediche e naturali, Firenze. 1948, Anno XI. estratto.

DEBONO, P.P. Michel'Angelo Grima, The Sundial, 1945, 4, 10.

ENGEL, C.E. Les Chevaliers de Malte, Paris, 1972, p.154.

GRIMA, M.A. Instituzioni d'anatomia, Venice, 1781, p.32.

GRIMA, M.A. Riflessioni del Sig. Grima sopra il taglio laterale, Firenze, 1761, p.68.

GUTHRIE, D.H. History of Medicine, London &

Edinburgh, 1947, p.238.

INGLOTT, G.F. Filantropi e scienziati maltesi, Malta, 31st May 1907, p.2.

Le journal de medecine, chirurgie, pharmacie, vol. 13, 1760, p.375.

Ms. 14, fol. 227, RML.

Ms. 146, Vol. 1, fol., 165, RML.

Ms. 22, fol., 142, RML.

Ms. 1146, Vol. 2, fol., 350, RML.

NESPOLI, E. Notizie istoriche della medicina e della chirurgia in Toscana, Firenza, 1831, p.20.

OSLER, W. The Evolution of Modern Medicine, New Haven, 1943, p.72. PSAILA, J.V. Grima, The Eighteenth Century Surgeon, Chestpiece, 1972, May, 29.

RISELY, M. The House of Healing, London, 1962, p.88.

TRECCANI, G. (Edit.). (a) Enciclopedia italiana, Vol. X, 1929, p.658.

Ibidam, (b), Vol. XXIV, 1929, p.200.

VISELTEAR, A.J. Joanna Stephens and the Eighteenth Century Lithontriptics, Bulletin of the History of Medicine, 1968, 42, 199.

WEBSTER, C. The Helmontian George Thomson and William Harvey. Medical History, 1971, 15. 154.