

**Special Session**

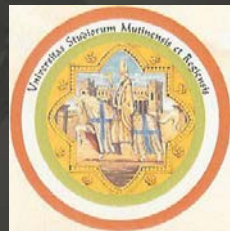
**Work-relatedness of health problems:  
a Blind Spot in curative care?**



# Ramazzini revisited: Have doctors learnt the lesson?

G Franco

School of medicine – University of Modena  
and Reggio Emilia - Teaching hospital, Modena - Italy



# Culture and society in XVII century Italy



Tommaso Campanella

Giordano Bruno



Guercino

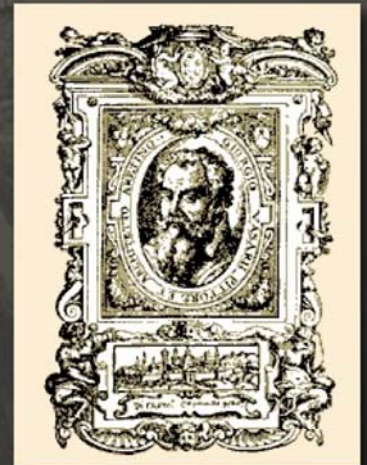
Claudio Monteverdi



Galileo Galilei



Pierluigi da Palestrina



Giorgio Vasari





# Biological Advances in XVII century

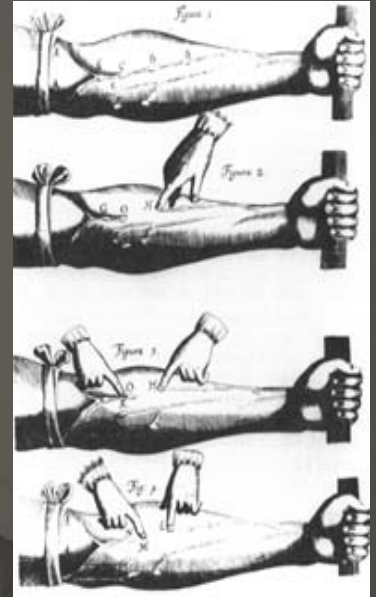


**Herman Boerhaave**  
“dissection of human bodies”



**Antoine van Leeuwenhoek**  
“observation of blood circulating  
in capillaries”

**Francesco Redi**  
“every living thing comes  
from an egg”



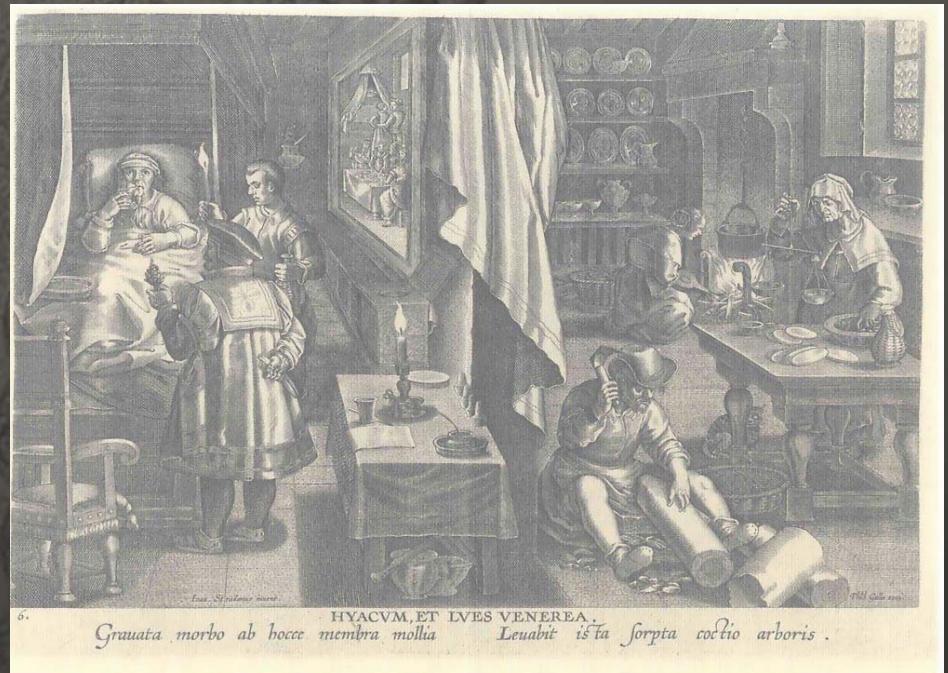
**William Harvey**  
“circulation of blood”



# Health problems in the XVII century

It was rather odd for clinicians of that time to devote themselves to the investigation of the relation between health and work

In fact, the majority of population faced health problems much more basic than work-related ones and doctors' attention was attracted mainly by the richest people illnesses





# Ramazzini's interest in workers' health

## At the beginning

- His attention was drawn to workers in foundries and tanneries during his student years

## The idea for the treatise

- It came when his attention was attracted by the speed with which a sewage worker emptied the sewer at Ramazzini's house
- The man answered that too long a stay in such place would cause blindness
- Ramazzini found that sewage workers showed severe reddening of the eyes and that many of them became blind



DE  
MORBIS  
ARTIFICUM

BERNARDINI RAMAZZINI  
IN PATAVINO GYMNASIO  
PRACTICÆ MEDICINÆ PROFESSORIS  
PRIMARI

DIATRIBA  
MUTINÆ OLIM EDITA.

Nunc accedit supplementum ejusdem  
argumenti,

AC DISSERTATIO

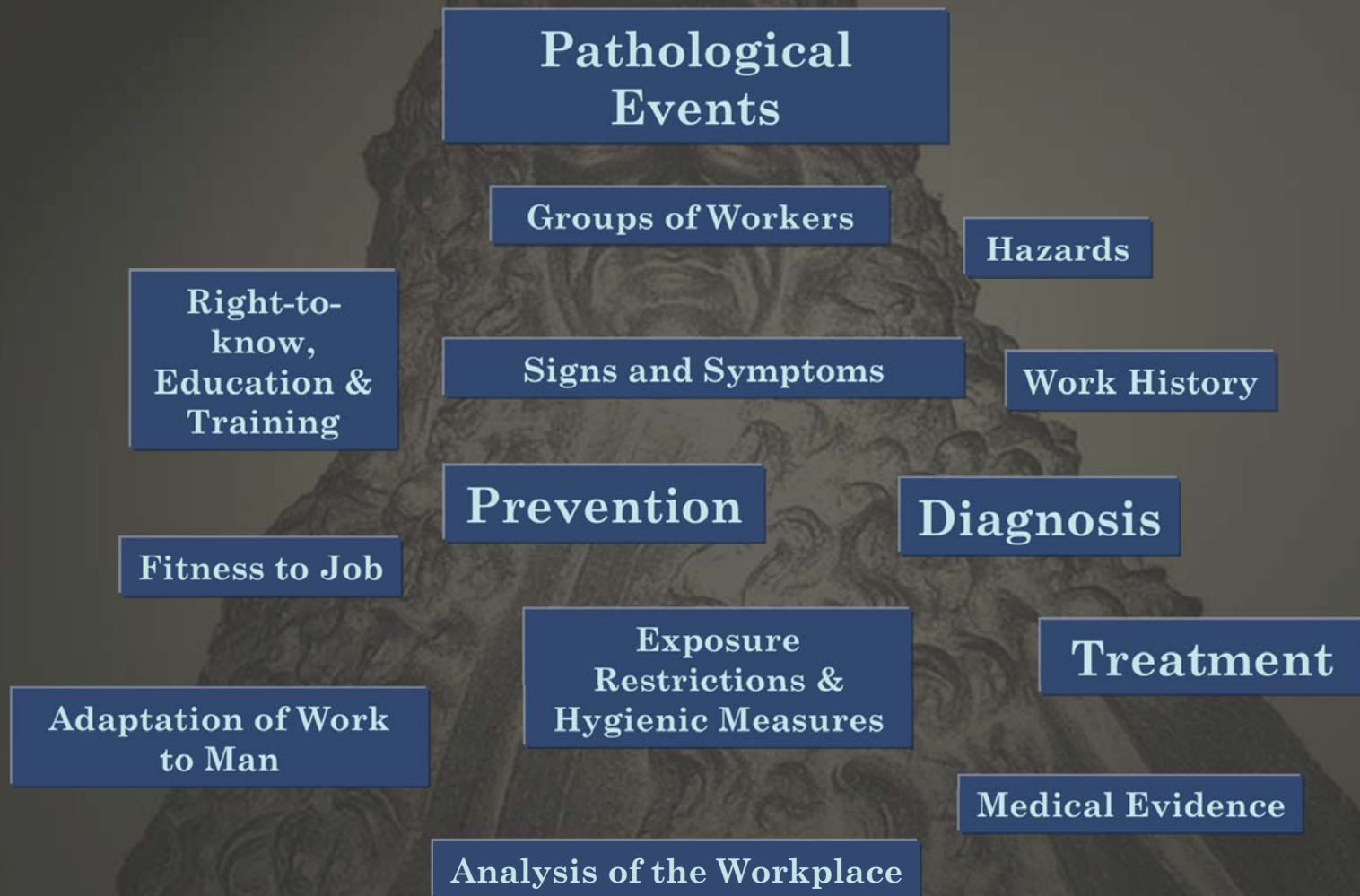
DE  
SACRARUM VIRGINUM  
VALETUDINE TUENDA.

PATAVII · M. DCC. XIII.

Per Jo: Baptistam Conzattum.

SVPER. PERM. AC PRIVIL.



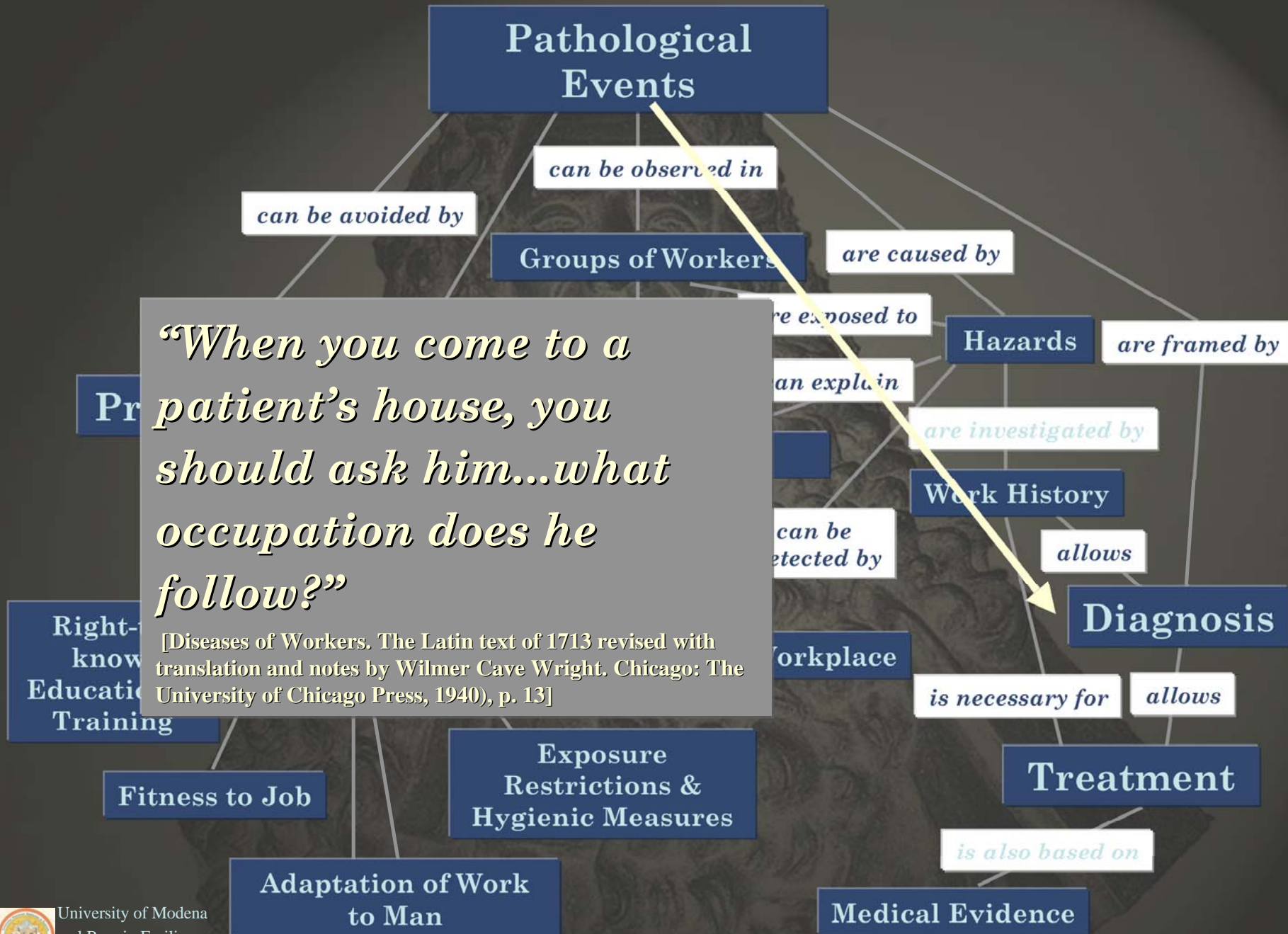






*“When you come to a patient’s house, you should ask him...what occupation does he follow?”*

[Diseases of Workers. The Latin text of 1713 revised with translation and notes by Wilmer Cave Wright. Chicago: The University of Chicago Press, 1940), p. 13]





Ars Medica quoque Symbolum suum con-  
ferat, & peculiari studio (quod adhuc ne-  
glectum) eorum incolumitati proficiat.

*“When you come to a patient’s  
house, you should ask him...what  
sort of pain he has, what caused  
them, how many days he has been  
ill...”* So says Hippocrates in his  
work *De Affectionibus*

...varia, ac diversa Artium gener-  
exerceantur, ex quibus varii Morbi in-  
boriri possint. Ex Artificum Tabernis igitur  
(quæ in hac re Gymnasia sunt, ubi  
quis eruditior evadat) eruere conatus sum  
quidquid Curiosorum palato possit magis  
sapere, &, quod præcipuum est, cautio-  
nes Medicas pro Morborum, quibus Ar-  
tifices tentari solent, tum curatione, tum  
præservatione suggerere. Medicus itaque  
in

in suo ad infirmum aliquem è plebe curan-  
dum ingressu, non tam subito, ut venit,  
sibi apponat, sicuti ut pluri-  
cubantis conditione, fie-  
re stans deliberet, quid  
humano corio tam facile lu-  
lulum tanquam Judex di-  
ce, si non super auratam  
aud Magnates, mos est,  
camnum tripes, aut Aba-  
vultu percunctari ægrum,  
quæ cum Artis præce-  
tis officia exposcunt. Mul-  
Medicus ad ægrotum acce-  
ipso, seu assidentibus, sci-  
Divini Præceptoris Ora-  
Ægrotum de veneris, interro-  
gare oportet, quæ patiat, & ex qua causa,  
& quot jam diebus, & an Venter secedat, &  
quo victu utatur, verba sunt Hippocratis in  
libro de Affectionibus; liceat quoque in-  
terrogationem hanc adicere, & quam Ar-  
tem exerceat. Quamvis autem hæc interro-  
gatio ad causas occasionales referri possit,  
illius tamen speciatim meminisse, ubi ple-  
bejus aliquis curandus habeatur, perop-  
portunum, imò necessarium existimo,  
quod



Ars Medica quoque Symbolum suum con-  
ferat. & nequidquam

Infirrum aliquem è plebe curan-

*“Accordingly I have tried to unearth in the shops of craftsmen, for these shops are schools whence one can depart with more precise knowledge...and, which is the main thing, to suggest medical precautions for the prevention and treatment of such diseases as usually affect the workers”*

exerceantur, ex quibus varii Morbi fu-  
boriri possint. Ex Artificum Tabernis igitur  
(quæ in hac re Gymnasia sunt, ubi  
quis eruditior evadat) eruere conatus sum  
quidquid Curiosorum palato possit magis  
sapere, &, quod præcipuum est, cautio-  
nes Medicas pro Morborum, quibus Ar-  
tifices tentari solent, tum curatione, tum  
præservatione suggerere. Medicus itaque  
in

gar oportet, quæ jam diebus, & an Venter secedat, &  
quo victu utatur, verba sunt Hippocratis in  
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illius tamen speciatim meminisse, ubi ple-  
bejus aliquis curandus habeatur, perop-  
portunum, imò necessarium existimo,  
quod



# Syllabus of occupations in the *de Morbis Artificum Diatriba*

**Apothecaries**

**Athletes**

**Bakers and**

**Millers**

**Bathmen**

**Blacksmiths**

**Brick-makers**

**Carpenters**

**Cheese-makers**

**Chemists**

**Cleaners of  
cesspits**

**Confectioners**

**Coppersmiths**

**Corn-sifters and  
Measurers**

**Corpse-workers**

**Farmers**

**Fishermen**

**Fullers**

**Gilders**

**Glass-makers**

**Healers by  
inunction**

**Hemp Flax, and  
Silk-workers**

**Horsemen**

**Hunters**

**Laundresses**

**Lutestring-  
makers**

**Midwives**

**Miners**

**Nurses**

**Oilmen**

**Painters**

**Plasterers and  
Lime-workers**

**Porters**

**Potters**

**Printers**

**Razor and Lancet  
Grinders**

**Runners**

**Sailors and  
Rowers**

**Salt-workers**

**Sedentary workers**

**Soap-makers**

**Soldiers**

**Starch-makers**

**Stone-cutters**

**Sulphur-workers**

**Tanners**

**The Learned**

**Tinsmiths**

**Tobacco-workers**

**Vintners**

**Voice-trainers  
and Singers**

**Weavers**

**Well-diggers**

**Workers on  
minutes objects**

**Workers who  
stand**

**Writers and  
Notaries**



# The relationship between occupations and diseases

## Chemicals agents

- Dangerous materials chemicals such as **mineral dusts** for miners and stonecutters, **vegetable particles** for tobacco and carding workers and **vapours** for vintners and confectioners, could be inhaled or penetrate the skin
- Disorders were **classified according to the agent**





# The relationship between occupations and diseases

## Physical agents

- **Excess noise** affecting coppersmiths
- **Other physical agents** (heat, cold, humidity) as potential causes of illnesses for people such as glassworkers, bakers, brickmakers and laundresses



# The relationship between occupations and diseases

**Impossibility to ascribe all workers' diseases to chemicals or physical agents**

**Common diseases caused by**

- maintenance of prolonged stationary postures or unnatural postures (workers who stand, sedentary workers, grooms, scribes, weavers)
- activities requiring heavy muscular effort (porters, woodworkers)





Atque hæc quidem ad Therapœjam ,  
modo pauca quædam documenta pro hu-  
jus meæ prælectionis coronide , in pro-  
philaxeos gratiam lubet proponere, quan-  
do longe præstantius est præservare, quam  
curare , sicuti fatius est tempestatem præ-  
videre , ac illam effugere , quam ab ipsa  
evadere .

*“...it is much better to prevent than to  
cure, and so much easier to foresee  
future harm and avoid it rather than  
have to get rid of it after having fallen  
prey”.*

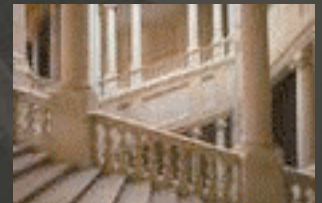




# Would Ramazzini's colleagues appreciate the topic?

He knew his colleagues would not appreciate this new approach, because it required to abandon habits of cleanliness and refinements

*“...I hesitate and wonder whether I shall bring bile to the noses of the doctors... if I invite them to come to the latrines”*



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