

## **Report of Science Club Meeting, September 26, 2017**

Thanks to Walt Widmer for his excellent talk on Microbiology. He reviewed the history of medicine starting in ancient times up to the present. An important point was the apparent lack of progress up until about 1850. This was primarily due to not applying the Scientific Approach to Medicine, along with the absence of good quality instruments, except for the Microscope. Fortunately, Semmelweis in Vienna used the scientific approach to determine the cause of death of women in the Maternity Ward--primarily Doctors delivering babies immediately after autopsies, without proper hand washing-- this was followed by scientifically studying deaths in London (contaminated water). Progress continued through Louis Pasteur (milk) and Lister (Listerine) up to today. A discussion on Flu Shots (highly recommended) followed, along with possible other topics for future meetings. I mentioned the Great Discovery Series--Norton & Co. Publisher as a source of information (see below).

It was encouraging to have approximately 30 members attend, and several topics for future talks and improvements for the meetings were discussed. At the October 17 meeting, we will present the first of a DVD series called 'Modern Physics for Non-Scientists', a course by Professor Richard Wolfson of Middlebury College. This program from the Great Courses Series, reviews the fundamental ideas of physics, starting in the year 1900, and leads to relativity and quantum physics. Each of the 24 lectures is 30 minutes long with the first entitled 'Time Travel, Tunneling and Tennis'. The plan is to use the DVDs at various meetings during the year when other activities are not scheduled. While the lectures build on one another, they will be presented such that continuity is maintained.

### **Recommend reading list:**

Great Discovery Series-- Norton & Co. Publisher

This series includes at least 12 well written, relatively short biographies of the people and science making 'The Great Discoveries'.

### **The authors and titles follow:**

- Nuland--Semmelweis, on lack of sanitation in maternity wards, resulting in high mortality rates.
- Kaku-- Einstein, relativity +
- Goldsmith-- Madam Curie
- Goldstein--Theory of 'Incompleteness', Godel's mathematical paradox
- Bell--Lavoisier, energy state transformation (neither created nor destroyed), takes place during French Revolution
- Johnson--Leavitt, a woman who determined how to estimate the size of the universe by cataloging stars while at Harvard (never recognized)
- Leavitt--Turing, breaking the Enigma code, invented computer mathematical concepts
- Vollmann--Copernicus, 'uncentering the earth'
- Quammen--Darwin, evolution
- Reeves--Rutherford atoms, molecules
- Lemonick--Herschel on cosmos