# From Hutchinson to now: a historical glimpse

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Jonathan Hutchinson is a convenient starting point for a glimpse through the history and milestones of sarcoidosis. The influence of various countries is recognized by its pioneers of sarcoidosis. This historical account is brought up-to-date by the word "NOW," implying how are we addressing the enigma that continues to elude us-namely, the cause of sarcoidosis. This review of the past 150 years or so outlines the countries and personalities that have carried the Olympic torch. Curr Opin Pulm Med 2002, 8:416-423 © 2002 Lippincott Williams & Wilkins, Inc.

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#### Abbreviations

 WASOG
 World Congress of Sarcoidosis and Other Granulomatous Disorders

 YAS
 Yugoslav Association of Sarcoidosis

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If you have a special affection for sarcoidosis, then you will enjoy the journey that will take you to meet the pioneers who identified its clinical manifestations at first in one system and eventually throughout the body. In Jonathan Hutchinson's day, sarcoidosis was a dermatologic curiosity. With the march of time, the disease gradually revealed itself as a multisystem disorder. Biochemistry, immunology, genetics, and molecular technology have added new dimensions. Each advance in knowledge broadens the horizon but the enigma of its cause continues to elude us. This glimpse of history draws attention to the milestones and to the international conferences that have been so successful in exchanging information worldwide.

Jonathan Hutchinson (1828-1913) was an international medical personality. He was born on July 23, 1828 at Selby, Yorkshire to a Quaker family. He graduated from St. Bartholomew's Hospital and soon became the bestknown medical consultant in London because of his wide range of interests. He was a dermatologist at the Blackfriars Hospital for Diseases of the Skin, an ophthalmologist at the Royal London Ophthalmic Hospital, a venereologist at the Lock Hospital, a physician at the City of London Chest Hospital, and a general surgeon at the London and Metropolitan Hospitals. He became president of the Royal College of Surgeons (1889), president of the Pathological Society of London (1879), president of the Ophthalmological Society of the United Kingdom (1883), president of the Neurological Society (1887), president of the Medical Society of London (1892), president of the Royal Medical and Chirurgical Society (1894-1896), and president of the International Dermatology Congress (1896). He was briefly editor of the British Medical Journal (Fig. 1) [1].

In January 1869, a 58-year-old coal-wharf worker John W. visited Hutchinson at the Blackfriars Hospital for Skin Diseases complaining of purple skin plaques that had gradually developed over the preceding 2 years, somewhat symmetrically, on his legs and hands. They were neither tender nor painful and did not ulcerate. Hutchinson considered that the skin lesions were in some way related to the patient's gout. "He came on account of a color on his extremities. He had an attack of gout in the metacarpophalangeal joint of his left forefinger while under treatment. No medicine had much effect on the eruption; he took at different times, colchicum and magnesia, arsenic, acid iron mixture, iodide of potassium, and simple alkaline mixture. No special local treatment was Figure 1. Jonathan Hutchinson (1828-1913) by Spy



Jonathan Hutchinson was an international medical personality.

adopted, only an ointment of lead and mercury being ordered...." Hutchinson's first published account of the patient appeared under the title, "Case of livid papillary psoriasis" in his "*Illustrations of Clinical Surgery*" in 1877 [2,3].

Since those days, there have been other British pioneers of sarcoidosis but none more intelligent than Professor Guy Scadding who was stimulated to take up sarcoidosis by Isidore Snapper, Professor of Clinical Medicine at the University of Amsterdam. Scadding consolidated his vast personal experience of the disease in the widely acclaimed book *Sarcoidosis* first published in 1967. Scadding collaborated with Sheila Sherlock (Later Dame Sheila Sherlock) on a study of aspiration liver biopsy. The test became the most valuable diagnostic aid and remained so for decades before being replaced by bronchoscopy and the advent of the fiberoptic bronchoscope. Sheila Sherlock was also a founder member of World Association of Sarcoidosis and other Granulomatous Disorders (Fig. 2).

In 1958, London held the first of a large series of World Conferences on Sarcoidosis (Table 1). In 1978, Dr. Jones Williams staged the 7th International Conference in the historic city of Cardiff in Wales. In 1995, Dr. Roland Dubois hosted the Fifth WASOG (15th International Conference) in London.

## The Scandinavian school

In the summer of 1869, Hutchinson visited Christiania University, where Dr. Bidenkap showed him a collection of pathologic drawings in the University Museum. Among these was one of a patient of Professor Carl Wilhelm Boeck (1808–1875). The patient, a healthy Swedish sailor had skin lesions similar to those of John W. but he did not suffer from gout. Professor Boeck was an uncle of Caesar Boeck (1845–1917), who was later to make valuable contributions to the study of sarcoidosis. Both Boecks occupied the professorial chair at Christiania (Oslo), separated in its tenure by Dr. Bidenkap, who had been Hutchinson's host and guide at Christiania.

Figure 2. Professor Dame Sheila Sherlock (1918-2001)



Professor Dame Sheila Sherlock popularized liver biopsy for diagnosing sarcoidosis.

#### Table 1. Milestones

1869	Jonathan Hutchinson's first account.
	Skin lesions? Psoriasis
1889	Besnier coined term lupus pernio.
1892	Tenneson defined histology.
1897	Caesar Boeck's policeman: skin lesions and histology.
	Lymphadenopathy
1902–20	Kienbock/Kreibich/Jungling: bone changes.
1906	Subcutaneous nodules
1909–10	Schumaker, Heerfordt, Bering: uveitis
1915	Schaumann-multisystem disorder: won
	Zambaco prize.
1915	Kuzbutsky: skin
	Bittorf: lung
	Bruins-slot: Pautrier/Longcope-Pierson/
1937	Waldenstrom: uveoparotid fever
1941	Kveim test
1946	Lofgren's syndrome
1958	International congresses: London
	Lofgren, Israel, Siltzbach, James: steroids for
	sarcoidosis, comparison in Washington
1960	conference
	Reynolds, Hunninghake: Fibreoptic
1967-81	bronchoscopy and bal
1976	Festschrift for Siltzbach
	J. Mount Sinai Med. Journal
1983	T cell $\rightarrow$ IL-2/Crystal/Hunninghake
1984	Gianfranco Rizzato starts journal sarcoidosis
1987	Gianfranco Rizzato starts wasog

Just before his death, Caesar Boeck published the details of 24 cases of "benign military lupoids;" some cases involved the lungs, conjunctiva, bone, lymph nodes, spleen, and nasal mucosa, underlining the multisystemic nature of the disorder [4].

Jorgen Schaumann (1879–1953) was born in Soustad, Malmohus, Sweden and studied medicine at nearby Lund. He became a dermatologist at Saint Goran's Hospital and the Finsen Institute in Stockholm. He provided a common pathologic basis for diverse clinical aspects, so he was the first to propose a clinicopathologic synthesis of multisystem sarcoidosis. He called it lymphogranulomatosis benigna to distinguish it from Hodgkin malignant granuloma. He described it in an admirable Zambaco prize essay written in 1914 but not published until 1936. He is buried near his birthplace in Ekebyholm [5].

Sven Lofgren (1910–1978) was a man of Stockholm in the same sense that Louis Siltzbach was every inch a New Yorker. He was born on March 1, 1910, received his medical training there, and married a Swedish physician, who bore him four children. His medical life revolved around Saint Goran's Hospital, where he came under the scientific influence of Westergren and Schaumann. Lofgren grasped the baton handed to him by Schaumann. His elegant studies brought the mysterious disease of sarcoidosis out of the shadows into the limelight as a common disorder with a good prognosis. The combination of erythema nodosum and hilar adenopathy became known as Lofgren syndrome [6]. Once he had defined it, the rest of the world recognized it. When Lofgren attended the first World Congress on Sarcoidosis in London in 1958, he was strongly of the opinion that sarcoidosis was unlike and unrelated to tuberculosis and he favored a viral cause. At that conference, he described renal sarcoidosis with kidney biopsy evidence of granulomas and associated abnormal calcium metabolism.

Ansgar Kveim (1892–1966) was born in Gjerstad, Norway and became a dermatologist in the department of Professor Nils Danbolt at the Rikshospitalet in Oslo from 1936–1945. He made the important observation that sarcoid lymph node tissue inoculated intradermally gave rise to papules of sarcoid tissue in 12 of 13 of his patients with sarcoidosis. Simultaneous control injections of Frei antigen and tuberculin did not produce that response. Because the reaction did not occur in healthy subjects nor in a patient with lupus vulgaris, he concluded that the papules were specific lesions caused by an unknown agent and that the test served to differentiate sarcoidosis from tuberculosis [7]. Kveim's son followed his father into the medical profession.

Nils Svanborg was born in Umea on February 5, 1920 and lived until the same month in 1997. He published the first and perhaps the only authoritative monograph describing pulmonary function abnormalities in sarcoidosis (Fig. 3) [8].

Christian Heerfordt (1871–1953) was born at Terndtrup, Denmark on December 26, 1871, the son of a local doctor. He eventually wrote his Copenhagen University doctorate on "Musclus Dilatator Pupillae." Heerfordt became an ophthalmologist who drew attention to febris "uveoparotidea subchronica," characterized by uveitis and enlargement of the parotid glands [9]. The condition ran a chronic and usually febrile course, frequently com-

#### Figure 3. Spiro Nils Svanborg (1920-1997)



Spiro Nils Svanborg produced the most comprehensive monograph on pulmonary function impairment in sarcoidosis.

plicated by cranial nerve palsies, especially of the seventh nerve and associated with pleocytosis of the cerebrospinal fluid. He described three patients and referred to others in the literature. He was so keen that Scandinavia and Europe formed a Single Community that he wrote two books "A New Europe I and II" during the years 1924–1926.

## **The French school**

In 1889, Besnier described a patient with vislaceous swellings of the nose, ears, and fingers, for which he coined the term lupus pernio. He referred to Hutchinson's patient John W. but the distribution of the lesions was sufficiently dissimilar to justify his opinion that the two conditions were not identical [10]. In 1892, Tenneson reported another example of lupus pernio and described the essential histology of "predominance of epithelioid cells and a variety of giant cells" in the skin lesions [11]. Their contributions were followed by Lucien-Marie Pautrier (1876–1959), a dermatologist at Saint Louis Hospital, Paris, and later a Professor of Dermatology at Strausbourg and Lausanne.

## Lucien-Marie Pautrier (1876–1959)

Lucien-Marie Pautrier's father was from Aix, and his mother from Arles; he was born in Marseilles on August 2, 1876. He studied there and in Paris, where he became a dermatologist with Louis Brocq at Saint Louis Hospital. His doctorate was an imposing 350-page document on "Atypical cutaneous tuberculosis" (surely sarcoidosis). During the First World War, he was in an artillery regiment and was awarded the Cross of Chevalier de Legion d'Honneur. He became professor of dermatology at Strasbourg and Lausanne. In his 1939 textbook on sarcoidosis, he opposed the tuberculous theory and re-

#### Figure 4. WASOG Meeting in Paris

Francoise Basset (center) flanked by Professor Chretien (left) and Professor Turiaf (right).

garded the disease as a reticuloendotheliosis. He died in Strasbourg on July 9, 1959 and is buried in his birthplace.

Jude Turiaf (1904–1989) was born in Martinique into a family of seven brothers and sisters; their father was a French senator. He qualified in Paris in 1943 and eventually joined Hopital Bichat in 1954, where he remained through the remainder of his life. A Chair of Respiratory Pathology was created for him, and he made the Bichat an international center of academic excellence in respiratory disease, particularly so in bronchial asthma, interstitial pulmonary diseases, and sarcoidosis. He pioneered the introduction of theophylline, cortisone, and aerosols. The Fourth World Conference on Sarcoidosis was held in September 12–15, 1966, under the genial presidency of Turiaf, and the proceedings are a voluminous information-crammed 782 pages. His photograph appears in several other World Conferences. He died in Paris on February 13, 1989.

Sarcoidosis became a multisystem disorder in the School of Jude Turiaf and his colleagues Jacques Chretien and Francoise Basset (Fig. 4).

Jacques Chretien was a former editor of the French Thoracic Society Journal and elected Honorary Fellow of the Royal College of Physicians, London. Monoclonal antibodies first featured in Sarcoidosis in the 1981 World Conference organized by Dr. Chretien in Paris.

## The Italian school

Italy has contributed more to the process of gathering information on sarcoidosis than any other country. Just stop and think of their activities. Professor Gianfranco Rizzato organized a World Conference in Milan in 1987,



and at the same time, he took the opportunity to found our World Congress of Sarcoidosis and Other Granulomatous Disorders (WASOG). This infrastructure enables sarcoidologists to exchange information worldwide. In 1984, Dr. Rizzato had already founded a journal devoted to sarcoidosis; this is now a flourishing scientific journal appearing four times each year under the editorship of Professor Gianpietro Semenzato. He is the perfect editor, for he is the best expert on the immunology of granulomatous disorders in Europe.

Italy is also blessed by the contributions of Professor A. Blasi, Carlo Grassi, C. Agostini, Dario Olivieri, and many other active members of the Italian School.

## The USA school

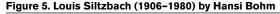
There were four distinguished American sarcoidologists at the First World Conference on Sarcoidosis in London (June 1958). They were Louis Siltzbach (Mount Sinai Hospital, New York City, New York), Martin Cummings (Bethesda, Maryland), Harold Israel (Philadelphia, Pennsylvania), and Maurice Sones (Philadelphia, Pennsylvania).

Until the first London Conference, sarcoidologists had read each other's articles but did not know each other. They met in a spirit of cordiality, and this spirit has pervaded all subsequent conferences. The American sarcoidologists followed up the London Conference with a second conference in June 1960 in Washington. It was masterminded by Dr. Martin Cummings and became a model for all subsequent conferences. It was fruitful for it produced a working definition and exemplary proceedings. Participants also included pioneers John Chapman, Carl Nelson, and Max Michael Jr. It was succeeded by another three World Conferences organized by Louis Siltzbach and Al Teirstein in New York (1975), by Carol Johns in Baltimore (1984), and by Om Sharma in Los Angeles (1993).

Louis Siltzbach (1906–1980) was a world leader in the sarcoidosis movement. Like John Wesley, it could be said that he spread the word around the world. We were able to publish his Festschrift when he was still well and able to enjoy it [12]. That monograph includes his curriculum vitae, complete bibliography, and articles by friends and colleagues (Fig. 5).

## The Japanese school

Japan has been a prolific contributor on granulomatous disorders with significant contributions on clinical features, epidemiology, microbiology, and immunology. It has hosted three World Conferences on Sarcoidosis and has a splendid Japanese Sarcoidosis Association. Dr. Yutaka Hosoda is its worldwide ambassador for he has great charm, charisma, is highly intelligent, and has made im-





Louis Siltzbach was a world leader in the sarcoidosis movement.

portant contributions as a chest physician and epidemiologist. He helped to set up a Japanese Commission on Sarcoidosis to indicate its frequency. He organized the highly successful Sixth World Congress in 1972 in Tokyo with 300 delegates representing 22 countries.

Dr. Takateru Izumi, Professor of Medicine at Kyoto University, organized the 1991 Conference in Kyoto jointly with the XI Annual Meeting of the Japan Society of Sarcoidosis. He also edited the 681-page proceedings as a special issue of *Journal Sarcoidosis*.

Professor Masayuki Ando hosted the Seventh WASOG Conference in Kumamoto in 1999 (Fig. 6).

# Germany

Germany deserves more than a glimpse when we consider pioneers Alexander Bittorf, Erich Kuznitsky, Paul Langerhans, Theodor Langhans, Friedrich Wegener, and more recently, Professor Dr. K. Wurm, Ulrich Costabel, Sydow-Meier, Eule, and J. Muller-Quernheim.

Germany was slow to join the sarcoidosis movement and did not hold an international conference until 1997. But Professor Ulrich Costabel made up for lost time with

### Figure 6. WASOG Executive Committee Members



The 6th WASOG Meeting on November 10th, 1999 in Kumamoto, Japan.

a superb and memorable conference organized in Essen in 1997.

# Czechoslovakia

Karl Kreibich (1869–1932) was born on May 20, 1869 in Prague and graduated in 1894 in the German Medical Faculty in Prague. He did extensive postgraduate studies in Vienna, including 6 years with Kaposi in the Dermatology Department. In 1909, he succeeded Pick as Professor of Dermatology and later becoming Dean (1913) and Rector (1923) of the German University in Prague. He died in Prague on December 30, 1932. Three

#### Figure 7. Impact factor of the Journal Sarcoidosis Vasculitis and Diffuse Lung Diseases

Founded by Professor Gianfranco Rizzato of Impact Factor Milan, this journal has become one of the best subspecialty journals. 1.8 1.524 1.6 1.406 1.4 1.2 1.0 0.623 0.8 0.6 0.230 0.4 0.130 0.2 0

1995

1997

1996

1998



2000

1999

1.690

of his 200 scientific papers were on lupus pernio. In one of his patients, he noted lattice-like rarefactions of the terminal phalanges; this was the first description of bone cysts in sarcoidosis [13].

Ladislav Levinsky, recently deceased, was a retired chest physician in Prague. Delegates from 37 countries attended his World Conference (1969), and from it, he produced a wide-ranging 653 page transactions.

## Portugal

Thome George Villar (1913-1980) was a man of Lisbon in every sense of the word. He was born, educated, practiced medicine, and died there. After postgraduate studies in Jersey City, he returned to Lisbon, where he became Professor of Lung Disease and President of Portugal's Respiratory Pathology Society in 1974. He was truly international being elected honorary fellow of the British Thoracic Society in 1977 and representing the American College of Chest Physicians as Fellow (1973) Governor (1974) and Regent (1978). He funded two Portuguese medical reviews, Pneumologia and Medicina Thoracica; became vice president of the International Association of Bronchopneumologia in 1973; and pursued active research on hypersensitivity pneumonitis, particularly suberosis. In 1976, he coauthored with Dr. Ramon Avila an international text on pulmonary granulomatosis caused by inhaled particles. Manuel Freitas e Costa was Professor of Respiratory Disease in the University Medical School, Lisbon. In 1989, he organized a highly successful conference attracting 322 delegates, 76 oral presentations, and 76 posters; the transactions formed a special issue of our journal, Sarcoidosis.

# Yugoslavia

For almost 30 years, Professor Olga Djuric and Professor Branisilav Djuric (a brother-sister team) kept the sarcoidosis candle burning by conducting clinical research and participating in various international conferences. In 2000, Dr. Violeta Vucinic formed Yugoslav Association of Sarcoidosis (YAS).

## India

Although a short review of sarcoidosis with a case report was published as early as 1957 in *Indian Journal of Dermatology* [14,15], the disease remained hidden under the menace of widespread tuberculosis for a long time. Over the last many years, Dr. Samir Gupta from Calcutta, Dr. Surinder Jindal from Chandigargh, and Dr. Rohini Chowgule from Bombay have continued to publish their experience on clinical aspects of sarcoidosis in India. On April 5th, 2002 a 1-day symposium on sarcoidosis was held at the famous Vallabh Bhai Patel Chest Institute, New Delhi. The sarcoidosis movement has finally arrived in India.

## Brazil

Newton Bethlem was Titular Professor of Physiology and Pneumology at the Federal University of Rio de Janeiro from 1964 to 1986. He taught sarcoidosis, wrote about it, and was a frequent participant at various national and international meetings. After his death in 1998, his son Eduardo Pamplona Bethlem inherited his father's love and dedication for sarcoidosis. He continues to be WASOG ambassador in South America.

## Our journal

No glimpse would be adequate without drawing fulsome praise and attention to our Journal. *Sarcoidosis Vasculitis and Diffuse Lung Diseases* appears quarterly and has become one of the best subspecialty journals (Fig. 7). Our hat is off to Professor Gianfranco Rizzato of Milan who founded the Journal.

## Conferences

The details of the International Conferences have been set out [16]. The last WASOG Conference was held in June 2002 in Stockholm. More than 200 delegates from 30 different countries attended the meeting.

## Now

The title of this essay includes the word NOW for, quite rightly, the past must be blended with the present. There is no better way of describing the present strength of sarcoidosis than by referring to the World Congress of Sarcoidosis held in June 2002 in Stockholm. It was hosted by Olof Selroos, Anders Eklund, and Johan Grunewald assisted by a large committee of Scandinavian experts on granulomatous disorders. The questions that we discussed 50 years ago were once again under intense scientific scrutiny.

Is sarcoidosis caused by microorganisms? Who gets sarcoidosis? What is its relation to other inflammatory disorders? Granuloma formation. What is it good for? Can we subdue progressive sarcoidosis?

## **References and recommended reading**

- 1 James DG: Centenary Commemoration of Sarcoidosis and Jonathan Hutchinson. Brit Med J 1969, 2:109–110.
- 2 Hutchinson J: Illustrations of Clinical Surgery. London J and A Churchill 1875.
- Hutchinson J: Case of livid papillary psoriasis. Illustrations of Clinical Surgery. London J and A Churchill 1877, 42.
- 4 Boeck C: Multiple benign sarcoid of the skin. J Cutan Gen Urin Dis 1899, 17:543–550.
- 5 Schaumann J: Lymphogranuloma benigna in the light of prolonged clinical observations and autopsy findings. Br J Dermatol 1936, 48:399.
- 6 Lofgren S: Primary pulmonary sarcoidosis. Acta Med Scan 1953, 145:424– 455.
- 7 Kveim A: En Ny og Spesifikk Kutanneaksjon ved Boeck's Sarcoid. Nord Med 1941, 9:169–172.

#### From Hutchinson to now James and Sharma 423

- 8 Svanborg N: Studies on the cardiopulmonary function in sarcoidosis. Acta Med Scandinav 1961, 170(suppl 366).
- 9 Heerfordt CF: Meber eine "Febris uveo-parotidea subchronica Graefes Arch." Clin Exp Ophthalmol 1909, 70:254.
- 10 Besnier E: Lupus Pernio de la Face. Ann Derm Syph (Paris) 1889, 10:33–36.
- 11 Tenneson H: Lupus pernio. Ann Derm Syph (Paris) 1889, 10:333–336.
- 12 James DG: Sarcoidosis and respiratory disorders: Festschrift in honour of Louis E. Siltzbach, MD. Mt Sinai J Med 1977, 44:683–879.
- 13 Kreibich K: Ueber lupus pernio. Arch Derm Syph (Wien) 1904, 71:3.
- 14 ATS/ERS/WASOG Statement: Sarcoidosis Vasculitis and Diffuse Lung Diseases 1999, 16:149–173.
- 15 Rajam R, Vishwanathan G, Rangiar P, et al.: Sarcoidosis. A short Review with a case report. Ind J Derm 1957, 23:950135.
- 16 James DG: Historical background. In Sarcoidosis and Other Granulomatous Disorders. Lung Biology in Health and Disease. Edited by James DG. Dekker; 1994:1–17.