

WORLD ASSOCIATION FOR SARCOIDOSIS AND OTHER GRANULOMATOUS DISEASE (WASOG) CENTERS OF EXCELLENCE

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The Executive Committee of the World Association of Sarcoidosis and Other Granulomatous diseases (WASOG) has approved 45 sites as WASOG Centers of Excellence (WASOG CoE). Table 1 lists the individual centers, their location, and the last name of the original principal investigator who completed the application. These 45 WASOG CoEs were chosen from 86 sarcoidosis center applications across the world. Of these submissions, 28 were from the United States, 15 from Europe (Belgium 1, France 1, Germany 3, Italy 2, Netherlands 2, Serbia 1, Spain 1, Switzerland 1, United Kingdom 2), and one each from India and the Middle East. More details regarding the sites and contact information can be obtained at <https://www.wasog.org/about/wasog-centers-of-excellence.html>.

The proposal for WASOG CoEs was first made by Drs. Baughman and Grutters in 2016. At the time, few guidelines existed for sarcoidosis centers of excellence. The Dutch had established national criteria and with the help of Dr Marlies Wijsenbeek, Drs Grutters and Baughman sent a questionnaire to sarcoidosis centers across the world. Simultaneously, a selection committee for the WASOG Centers of Excellence (WASOG CoE) was established (Table 2). This committee included health care providers and sarcoidosis patients from the Foundation for Sarcoidosis Research and European Lung Foundation. In addition, Kelly Bauer and later Lesley Baxter from

the Foundation for Sarcoidosis Research assisted in the collection of questionnaires.

The selection committee for the WASOG CoE reviewed the results from the questionnaires and developed a second questionnaire that was sent to all applicants. In addition, the WASOG CoE selection committee graded individual items (Table 3) based on the committee's ranking of level of importance. Most important features for a center of excellence included patient access to center, an established registry of patients, sufficient numbers of sarcoidosis patients, access to sarcoidosis experienced multispecialty disciplines, and published original research in sarcoidosis.

The WASOG CoE designation was never intended to be static. Drs. Culver and Wells have assumed co-chairship of the committee and current and potential centers are asked to apply for renewal or new CoE membership, respectively. Because of the COVID-19 pandemic, this round of applications has been placed on hold until 2022. At that time, all current and potential new centers will be evaluated in a blinded fashion. New and updated features have been added to the next evaluation process. Each WASOG CoE will need to identify at least one sarcoidosis generalist, who has a comprehensive view of the various phenotypes and complications of the disease. In addition to assure standard criteria global

compliance, all potential WASOG CoE sites will undergo a virtual or in-person site visit. Patient experience criteria will also be incorporated in future versions of the CoE application.

Over the past few years, WASOG and the academic community have made great strides in providing evidence-based guidelines for the diagnosis (1) and treatment (2) of sarcoidosis as well as guidance on the diagnosis and management of sarcoidosis associated pulmonary hypertension (in press). In the

future, the application of these guidelines may prove useful in assessing WASOG CoE.

REFERENCES

1. Crouser ED, Maier LA, Wilson KC, Bonham CA, Morgenthau AS, Patterson KC et al. Diagnosis and Detection of Sarcoidosis. An Official American Thoracic Society Clinical Practice Guideline. *Am J Respir Crit Care Med* 2020; 201(8):e26-e51.
2. Baughman RP, Valeyre D, Korsten P, Mathioudakis AG, Wuyts WA, Wells A et al. ERS clinical practice guidelines on treatment of sarcoidosis. *Eur Respir J* 2021;2004079-2020.

Table 1.

| Center Name | City | Original Center Director, Last Name |
|--|-------------------------|-------------------------------------|
| Shahid Beheshti University of Medical Sciences | Tehran, Iran | Abedini |
| Washington University in St. Louis | St. Louis, MO USA | Anderson |
| Respiratory Diseases and Lung Transplantation Unit | Italy, Siena | Bargagli |
| University of Alabama at Birmingham | Birmingham, AL USA | Barney |
| University of Cincinnati | Cincinnati, OH USA | Baughman |
| University of Minnesota | Minneapolis, MN USA | Bhargava |
| Ruhrlandklinik University Hospital | Essen, Germany | Bonella |
| Mayo Clinic | Rochester, MN USA | Carmona Porquera |
| Sarcoidosis Specialty Clinic at Ohio State University | Columbus, OH USA | Crouser |
| University of Iowa | Iowa City, Iowa USA | Gerke |
| St. Antonius Hospital | Nieuwegein, Netherlands | Grutters |
| Yale University - Winchester Chest Clinic | New Haven, CT USA | Gulati |
| Sarcoidosis Clinic at Temple Lung Center | Philadelphia, PA USA | Gupta |
| University of Texas Southwestern Medical Center, and Parkland Health and Hospital System | Dallas, TX USA | Hsia |
| Medical University of South Carolina | Charleston, SC USA | James |
| Albany Medical College | Albany, NY USA | Judson |
| Centre for Neurosarcoidosis | London, United Kingdom | Kidd |
| Interdisziplinäre Sarkoidose Sprechstunde | Zurich, Switzerland | Kolios |
| Thoraxklinik at Heidelberg University Hospital | Heidelberg, Germany | Kreuter |
| University of Pennsylvania | Philadelphia, PA USA | Ligon |
| UCLA | Los Angeles, CA USA | Lynch |
| National Jewish Health | Denver, CO USA | Maier |
| University of Miami Sarcoidosis Program | Miami, FL USA | Mirsaeidi |
| Mount Sinai New York | New York, NY USA | Morgenthau |
| East Carolina University Sarcoidosis Clinic | Greenville, NC USA | Obi |
| University of Florida Sarcoidosis Clinic | Gainesville, FL USA | Patel |
| Hannover Medical School | Germany, Hannover | Prasse |
| Cleveland Clinic Florida | Weston, FL USA | Rahaghi |

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|---|------------------------|---------------|
| G.B. Morgagni Hospital | Forli, Italy | Ravaglia |
| Cleveland Clinic | Cleveland, OH USA | Ribeiro Neto |
| New Orleans Scleroderma and Sarcoidosis Patient Care and Research Center | New Orleans, LA USA | Saketkoo |
| Hospital Clinic Barcelona | Barcelona, Spain | Sellaris |
| Northwestern Medicine | Chicago, IL USA | Sporn |
| University of Illinois Sarcoidosis Translational Advanced Research Center, STAR | Chicago, IL USA | Sweiss |
| Virginia Commonwealth University | Richmond, VA USA | Syed |
| Metro Centre for Respiratory Diseases (MCRD) | Noida India | Talwar |
| University Paris-Nord | France, Paris | Valeyre |
| The Emory Clinic | Atlanta, GA USA | Veeraraghavan |
| Comprehensive Sarcoidosis Program University | Rochester, NY USA | Vidula |
| University Clinic of Pulmonary Diseases, Belgrade | Belgrade, Serbia | Vucinic |
| Royal Brompton Hospital | London, United Kingdom | Wells |
| Erasmus University Medical Center | Rotterdam, Netherlands | Wijsenbeek |
| Stanford Multidisciplinary Sarcoidosis Program | Stanford, CA USA | Witteles |
| UZ Leuven Gasthuisberg | Leuven, Belgium | Wuyts |

Table 2. WASOG CoE selection committee

| Name | Country |
|-----------------------------|--|
| Jan Grutters (co chair) | Netherlands |
| Robert Baughman (co chair) | United States |
| Dan Culver | United States |
| Athol Wells | United Kingdom |
| Ennis James | United States |
| Marlies Wijsenbeek | Netherlands |
| Paolo Spagnolo | Italy |
| Dominique Valeyre | France |
| Arata Azuma | Japan |
| Marjolein Drent | Netherlands |
| Parthasarathu Bhattacharyya | India |
| Violetta Vucinic | Serbia |
| Elyse Lower | United States |
| Antje Prasse | Germany |
| Jessica Reid | United States, FSR patient representative |
| Sandra Detter | United State, FSR patient representative |
| Jack Richardson | United Kingdom, ELF patient representative |
| Sebastian Opitz | Switzerland, ELF patient representative |
| Kelly Bauer | United States, FSR non voting member |
| Lesley Baxter | United States, FSR non voting member |

FSR: Foundation for Sarcoidosis Research; ELF: European Lung Foundation

Table 3. Questions from questionnaire used to rank centers**Site**

Principle investigator(s)

Co-Principle Investigator(s)

Other Health care providers

Do you have a sarcoidosis clinic

Do you have a registry of sarcoidosis patients

Number of patients in registry

In past year

Total number of patients seen

Number of new cases

Sarcoidosis specific conferences at your institution

Indicate most frequent way of handling each manifestation: 1. At the clinic; 2. Refer to another clinic within your institution; 3. Refer to another clinic/physician within your geographical area; 4. Refer to another center more than 25 miles from your clinic

Pulmonary

Ocular

Skin

Cardiac

Neurologic

Liver

Pulmonary hypertension

Do you have specific radiologists/nuclear medicine/MRI that you work with for sarcoidosis

Names

Names of specialists who you most frequently refer to in the following areas (including yourself)

Pulmonary

Ocular

Skin

Cardiac

Neurologic

Liver

Pulmonary hypertension

Others

Treatments

Do you prescribe infliximab or other intravenous treatments for sarcoidosis

Do you have an infusion center associated with your clinic

Do you prescribe intravenous infusions to treat sarcoidosis associated pulmonary hypertension

(continued)

Patient support

Do you have a patient support group

Have you talked at a patient support meeting in past 3 years

Have you talked at a regional or national sarcoidosis support meeting (e.g. FSR) in past 3 years

Education

Have you attended in past three years

WASOG /AASOG/JASOG

Research

Have you participated in clinical trials in sarcoidosis in past five years?

Single center

Multi-center

Areas of research (etiology, epidemiology, diagnosis, therapy)

Has your center had funding for sarcoidosis research in past five years?

Local/institution

National (e.g. National Institutes of Health, Lung counsel)

Industry

Please provide up to five articles published by your group in the past five years
