

BSMM News



June 2021

www.bsmm.org

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The President's Column



Dear BSMM members,

Although there seems to be a brighter horizon for us in the UK, I am very conscious of the many guests, friends, colleagues and collaborators that the BSMM members have in India, Brazil and many other countries are struggling with the global peak of Covid infections. Mercifully, for us we are beginning to look forward to a time when we might be able to meet again and enjoy the fellowship of our society face to face. The Mycology 2021 meeting will have to be virtual, but in October many of us will meet in Aberdeen for the 10th TIMM meeting – and next year we are starting to plan the resumption of a traditional BSMM annual meeting. By the way, we are very keen to hear from anyone who might be willing to step forward and help organise the BSMM 2022 meeting and BSMM2023 meeting as local hosts. Both the Mycology 2021 and TIMM events look to be tremendous feasts of mycology – I am sure you will be entertained and informed, so do make sure you have registered. The BSMM is also

contributing a session on paediatric mycology to the FIS meeting in November.

The last month has been extremely busy and impactful for the society. We are quickly approaching the time of our Extraordinary General meeting when we will formally ratify the BSMM as a charitable incorporated organisation. That may seem like uninteresting bureaucracy to many, but this new status will enable us to organise ourselves much better and will provide additional protection to all those who volunteer to act as society trustees. We have bene very ably guided by Julian Lomax as an external consultant, who has provided invaluable advice as to how to hurdle the various stages of the process, and our general Secretary Rebecca Gorton and Treasurer Caroline Moore have gone above and beyond to shepherd through the mountains of necessary documentation. It will be a relief and moment to celebrate in our society's history when our incorporation is finally achieved. We need to be quorate at the EGM to make the key vote, and so please do make every effort to attend, or submit your proxy vote that will be sent to you shortly.

Sad news this month that LaJean Chaffin died on April 20th. LaJean was a major figure in the Candida community, and her long career, mostly in Lubbock Texas at the Tech University Health Science Center, made many contributions to medical mycology and in particular the cell biology, molecular biology, and pathogenicity of *Candida albicans*. She made many important insights into cell wall biochemistry and biofilm formation. She cofounded the ASM's conference series on Candida and Candidiasis that had its last iteration this year in March. In addition to being a skilled researcher she was also an accomplished musician and historian. This comes on the shoulders of other sad news, in particular of our former President, General Secretary and greatly loved friend and colleague Frank Odds (see obituary below) who died on July 7th 2020.

Finally, can I make a plea to those of you with time and passion for medical mycology to consider helping out and allowing yourself to be nominated for one of the 6 posts we need to replace on the BSMM executive. We are looking for a Treasurer (elect), a new General Secretary, a society meeting secretary, a junior representative and two council executive positions. The BSMM is a vitally important institution, and a friendly one, and it would be appreciated hugely if you would consider offering your support.

Prof Neil Gow
BSMM president

Obituary: Frank Odds



Professor Frank C Odds, a world leading authority in medical mycology died peacefully in his home in Aberdeen on July 7th 2020 at the age of 74. Frank was recognized internationally for his studies of fungal pathogens and the diseases they cause, particularly in the context of *Candida* infections and antifungal agents. He was one of very few scientists in the world who was recognized as an authority by academics, clinicians and those in the pharmaceutical industry. Professor Odds was prominent at major conferences as someone who was entertaining, thought-provoking and informing in equal measure. He was an inspiring scientist, a wonderful colleague and mentor, and a great friend to an uncountable number of people in the medical mycology community. He wrote the defining text *Candida and Candidosis*, which remains a major authority on this organism well after the publication of its last edition in 1988, as well as around 300 original research and review articles on the pathogenesis, diagnosis, epidemiology and treatment of fungal infections. He was listed in the ISI Most Highly Cited Scientists (Microbiology) database in 2007.

Frank made many seminal contributions to his field. His method for biotyping *C. albicans* isolates was adopted by many other laboratories internationally until DNA typing methods supplanted the phenotypic approach. He then played a major role in the determination of the population structure of *C. albicans* and other *Candida* species by multi-locus sequence typing (MLST) that opened novel avenues for the exploration of virulence factors in the fungus across clinical isolates from different phylogenetic groups. He served as curator for the *Candida* MLST database for many years and his efforts to devise MLST for *C. parapsilosis* led to the discovery of two new *Candida* species, *C. metapsilosis* and *C. ortopsilosis*. He adopted novel approaches to further understand the cellular and molecular basis of development of cell shape in *C. albicans* including the use of azole antifungal compounds as specific inhibitors of hyphal branch formation, and image analysis to establish a mathematical basis for the description of cell shape, such as the “morphology index”, Mi. He helped to establish the role of secreted proteases as *Candida* virulence factors and, along with Reinhard Ruchel’s group, published the first sequence of a *Candida* protease gene. Frank was a leading authority in animal models of fungal infection and showed, for example, how the adjustment of inocula to equal potency in terms of lethality facilitates monitoring of post-challenge virulence effects. Along with Donna MacCallum he devised a 3-day infection model that facilitated rapid evaluation of the relative virulence of *Candida* strains and mutants.

Frank was an authority on antifungal drugs having led the antifungal drug discovery programme as Director of Bacteriology and Mycology at the Janssen Research Foundation (Johnson & Johnson) in Belgium for 10 years. While there, he played a major role in the development of azole and triazole antifungals. Eighteen patents bear Prof. Odds’ name as co-inventor and he served as a consultant and/or experimental contractor for more than 20 pharmaceutical companies. His work in this area meant he was involved as the

chief coordinator on the reports of numerous international studies, clinical trials and case reports of antifungal agents.

Born on 29th August 1945, Devon, England, Frank was educated in the South West of England. He undertook undergraduate and PhD degrees at the University of Leeds. He became a visiting Fellow at the Center for Disease Control, in Atlanta USA (1970–72) before returning to the UK to undertake a postdoctoral fellowship at the University of Leeds (1972–75). From there he took up his first faculty role as lecturer and then senior lecturer in Medical Microbiology at the University of Leicester, UK (1975–89). He then became Director of Bacteriology & Mycology, Janssen Research Foundation, Beerse, Belgium (1992–99) before moving to his final academic role in 1999 as Professor of Medical Mycology in the Aberdeen Fungal Group at the University of Aberdeen, Scotland. He retired in 2009.

During his distinguished career, Frank held many significant advisory and community roles. He served as President of the International Society for Human and Animal Mycology, President of the European Confederation of Medical Mycology, Honorary Secretary and President of the British Society for Medical Mycology, and Chair of the Medical Mycology Division F of the American Society for Microbiology. He served as co-chair and chair of the Wellcome Trust Immunology and Infectious Disease grant panel and on numerous editorial boards of international journals including acting as Chief Editor of *Current Topics in Medical Mycology*. Frank was also Editor in Chief of the ISHAM journals: *Sabouraudia: Journal of Medical and Veterinary Mycology* (1980-85) that became the *Journal of Medical and Veterinary Mycology* (1986-87).

Frank's honours included Fellowship of the Royal Society of Edinburgh, Fellowship of the American Academy of Microbiology, and Honorary Membership of the British and International Medical Mycology societies. He was awarded many prestigious prizes including an ISHAM award and medal, the Maxwell L. Littman Award from the New York Medical

Mycology Society, and a Pfizer Award in Biology. He was also awarded an MRCPATH and FRCPATH in recognition of his clinical expertise.

Frank helped in large measure to establish the reputation of the emerging Aberdeen Fungal Group as a pre-eminent presence in medical mycology and was an integral part of the foundations upon which the current University of Exeter MRC Centre for Medical Mycology was established in 2019. At Aberdeen, he established multiple close academic partnerships and friendships with other members of The Aberdeen Fungal Group and was involved in establishing their Wellcome Funded Strategic Award, which further advanced cross-institutional collaborations in the UK and the training of early career researchers from low and middle income countries. Many of his former students now hold independent positions around the world.

Frank had many interests and immersed himself in everything he did. He was a concert standard pianist and he played the piano for the singsong at the BSMM annual meeting that was an integral part of the traditions of this society. He was a true polymath: not only a world authority in medical mycology, but also with major interests in the relationship between science and pseudoscience as well as in computing and the capturing of information in databases. He wrote, for example, the world's smallest ever program for word processing, which was listed in the Guinness Book of Records from 1985 for the following 7 years. As a teenager, he discovered a geometric algorithm called "spirolaterals", which have since gone on to be used architecturally and in design, as well as in mathematical education. His serious academic credentials were complemented by his wicked sense of humour and sense of fun. His seminar on "How Not to Give Seminar" was an example of his ability to inform and entertain in the same breath. He was a loyal friend to an extended scientific family, and a passionate supporter of many students, postdocs and established scientists as well as many researchers at all levels of seniority.

Frank was a devoted family man, and, with a keen interest in photography, he enjoyed cataloguing the many adventures, travels and holidays of his wife Ali, and children Jo, Kathy and Graham on film and in pictures. Recently he became the proud grandfather to Malcolm, Fraser and Jessica.

To say Frank will be missed does not do justice to the sense of loss of his family, friends and colleagues. However, he leaves an incredible and indelible academic legacy as well as many happy memories in the medical mycology community where he devoted his energies so generously and tirelessly.

Neil A.R. Gow 19/7/20

BSMM website (www.bsmm.org)

Please note that the previous login system for members has been discontinued, but there is still a BSMM members section for accessing the BSMM resources. Login details for accessing the members section will be the same for all members and circulated via email upon subscription. Please note that these details are general for the membership: please do not change.

For **payment or renewal of the annual membership fee**, it is not necessary to have a PayPal account. Before pressing the PayPal button, we invite the members renewing their membership or joining the society to kindly insert their name in the textbox above the PayPal button, as a reference for the payment.

We welcome feedback and suggestions from the BSMM members, so please get in touch on our Facebook page or email us at info.bsmm@gmail.com. Furthermore, we are looking for some additional images to use, so if you want to showcase your research, please send your images (with a legend) and these will be included on the website.

Mycology 2021

MYCOLOGY 2020 will now be MYCOLOGY 2021 and will take place on 11th & 12th June 2021 2-day virtual conference

Day 1

09: 30

Welcome and opening remarks

Prof. Neil Gow and Dr. Samir Agrawal

KEYNOTE LECTURE

Chair: Neil Gow

09:45 *Agostinho Carvalho* - [View Bio](#)

Host susceptibility to pathogenic fungi

Parallel 1: Haemato-oncology 1: IFD prophylaxis and management

Chair: Samir Agrawal

10:15 *Philipp Köhler* - [View Bio](#)

Cologne, Germany

10:35 *Alessandro Busca* - [View Bio](#)

Turin, Italy

10:55 *Samir Agrawal*

London

11:15 Q&A

Parallel 2: Offered Papers

Chair: Adilia Warris

10:15 *Stephanie Diezmann* - [View Bio](#)

Who regulates the regulator? – Kinase mediated regulation of the molecular chaperone Hsp90 and its role in fungal virulence

10:35 *Elena Shekhova* - [View Bio](#)

Mitochondrial reactive oxygen species regulate macrophage antifungal responses.

10:55 *Sara Gago* - [View Bio](#)

Comparative genomic analyses of *A. fumigatus* strains reveal disease-specific pathogenicity drivers

11:15 Q&A

Parallel 1: Invited Lecture - Haemato-Oncology 2: Is there an optimal IFD protocol?

Chair: Mansour Ceesay

11:35 *Johan Maertens* - [View Bio](#)
Haemato-Oncology 2: Is there an optimal IFD protocol?

Parallel 2: Offered Papers
Chair: *Lewis White*

11:35 *Edward Wallace* - [View Bio](#)
Cryptococcus as a model system for gene expression regulation: control of protein abundance and structure by alternate start codons and their sequence context

11:55 *Elaine Bignell*
Gilead Fellows Talk 1: Antifungal modes of action: Old and New

12:20
Symposium supported by Gilead

13:00
Lunch break

13:30
Symposium supported by Pfizer
COVID-19 and invasive aspergillosis: what do we need to know?
Dr Neil Stone

PLENARY: KEYNOTE PRESENTATION - SUPPORTED BY ISHAM

Chair: *Malcolm Richardson*

14:00
Medical mycology at a cross-road: the role of international organizations
Arunaloke Chakrabarti - [View Bio](#)

Parallel 1: Diagnostics
Chair: *Lewis White*

14:40 *Martin Hoenigl* - [View Bio](#)
Performance of different lateral flow assays for rapid detection of aspergillosis – Presentation via Skype

15:00 *Paul Verweij* - [View Bio](#)
Assays for rapid detection of antifungal resistance

15:20 *Julianne Kus* - [View Bio](#)
Next-generation sequencing for invasive fungal diseases: Applications in a clinical mycology laboratory

15:40 Q&A

Parallel 2: Meet the Pathogen
Chair: *Elaine Bignell*

14:40 *Alexandre Alanio* - [View Bio](#)
Pneumocystis jirovecii, from the organism to the disease

15:00 *Robin May* - [View Bio](#)
Cryptococcus gattii and long distance virulence

15:20 *Mike Bromley* - [View Bio](#)
COFUN: An update on the construction and use of genome wide-knockout library in *A. fumigatus*

15:40 Q&A

Parallel 1
Chair: *Johan Maertens*

16:00 *Eveline Snelders* - [View Bio](#)
Fungal adaptation in CF and CPA through parasex: How to survive without sex.

Parallel 2: Flash talks
Chair: *Rebecca Gorton*

16:00 *Jessica Price* - [View Bio](#)
An evaluation of the performance of the IMMY sona *Aspergillus* Galactomannan Lateral flow assay when testing serum to aid in the diagnosis of invasive aspergillosis.

16:15 *Sudaxshina Murdan* - [View Bio](#)
Identification Of Drug Combinations To Entrap In A Carrier For The Treatment Of Onychomycosis

16:30 *Aize Pellon* - [View Bio](#)
Carbohydrate metabolism regulates immune responses of the oral epithelium to *Candida albicans*

INTERACTIVE CASE STUDIES

Chair: *Jonathan Lambourne*

16:45
Case Studies
TBC

17:00
Close of day 1

Day 2

Parallel 1: NGS and Mycobiome
Chair: *Malcolm Richardson*

09:20 David Moyes - [View Bio](#)
Microbiome-mycobiome interactions and human disease

09:40 Oliver Kurzai - [View Bio](#)
Understanding the impact of genetic variation on the host response towards infection – Presentation via Skype

10:00 Darius Armstrong-James
Gilead Fellows Talk 2: Triazole resistance mechanisms in *Aspergillus fumigatus*: what do we learn from full genome sequencing?"

10:20 Q&A

Parallel 2: Offered Papers
Chair: Paul Verweij

09:20 Jorge Amich - [View Bio](#)
Interdependency of host and pathogen protein persulfidation governs disease severity in experimental and human aspergilloses

09:40 Anaïs Herivaux - [View Bio](#)
Toward new insights into the role of the lung microbiota in invasive pulmonary aspergillosis

10:00 Margherita Bertuzzi - [View Bio](#)
Epithelial uptake of *Aspergillus fumigatus* spores drives efficient fungal clearance in vivo and is aberrant in Chronic Obstructive Pulmonary Disease (COPD) patients

10:20 Q&A

KEYNOTE PRESENTATION

Chair: Neil Gow

10:30 C-type lectins in anti-fungal immunity
Gordon Brown - [View Bio](#)

Fungal infections in CF and bronchiectasis
Chair: Rohini Manuel

11:10 Andrew Jones - [View Bio](#)
Diagnosis of fungal pathogens in CF

11:40 Micheàl Mac Aogàin - [View Bio](#)
Sensitization in Non-Cystic Fibrosis Bronchiectasis

12:00 Anand Shah - [View Bio](#)
Managing non-*Aspergillus* mould infections
12:20 Q&A

PLENARY: BSMM V FUNGAL UPDATE DEBATE

Chair: Samir Agrawal

12:35
Optimal fungal management – Immunology not microbiology?

Frank Van de Veerdonk and Silke Schelenz

13:15 Jean-Pierre Gangneux
Session sponsored by IMMY
The turning point of rapid tests for the diagnosis of invasive fungal infections

13:30 Varun Mehra
Session sponsored by Cidara Therapeutics
Rezafungin: a Novel, Once-Weekly Echinocandin in Phase 3 Development for Treatment and Prevention of Invasive Fungal Disease.

13:45
Lunch break

PLENARY KEYNOTE PRESENTATION

Chair: Darius Armstrong-James

14:30
Update on influenza associated aspergillosis
Frank Van de Veerdonk - [View Bio](#)

Parallel 1: Immunity and clinical impact
Chair: Duncan Wilson

15:00 Lewis White - [View Bio](#)
SNPs and risk stratification for the clinic

15:20 Peter Cook - [View Bio](#)
Host response to *Aspergillus* in asthma and allergic lung disease

15:40 Jatin Vyas - [View Bio](#)
Offered paper – *Aspergillus fumigatus* Cell Wall Promotes Apical Airway Epithelial Recruitment of Human Neutrophils

16:00 Q&A

Parallel 2: Oral presentations from selected abstracts
Chair: Adilia Warris

15:00 Bethany McCann - [View Bio](#)
Reverse engineering of *Aspergillus* pH signalling for anti-fungal drug discovery

15:20 *Samuel Gonçalves* - [View Bio](#)
Calcium sequestration by fungal melanin reprograms macrophage metabolism toward glycolysis and antifungal immunity

15:40 *Rebecca Gorton*
Prospective evaluation of T2MR for the diagnosis of Invasive Candidiasis in ICU patients

16:00 Q&A

16:30
Plenary: Presentations of prizes for winning posters
Darius Armstrong-James

16:45
Closing remarks
Samir Agrawal and Neil Gow

BSMM Travel grant applications

The next travel grant deadlines will be 1/09/2021 and 1/03/2022. More information at: <http://www.bsmm.org/front/grants-funding/>

Travel grant reports from grant recipient

Due to conference cancellations we have no reports to publish for this Newsletter, but we are very much looking forward to the return of conferences in the coming year. To be continued.....

Glyn Evans Award



The Society recognized the huge contribution Prof Glyn Evans made to the BSMM and mycology by providing an award to members to provide financial support to visit another laboratory for a period of training, usually to learn a specific technique. The Award contributes towards the costs of travel, accommodation and directly related expenses.

There are no set application deadlines for this award and applications may be submitted for consideration at any time. An award will not

usually be made if the applicant has received a previous award (Travel Grant or Glyn Evans Award) less than three years before the application date.

More information at: <http://www.bsmm.org/front/grants-funding/>

Subscription & access to Mycoses online

The annual membership subscription is £25. Please remember to pay your membership fees of £25 (<http://www.bsmm.org>) for 2021 using the 'Buy now' PayPal link that will allow you to pay by debit or credit card. Please note that you do not need a PayPal account in order to complete payment or to log in as a BSMM member for payment.

BSMM Junior



BSMM Junior is a resource for junior medical mycologists to allow scientific discussion and communication. We have set up BSMM Junior Twitter and Facebook pages to promote the BSMM to junior members of the society and to encourage interaction between young medical mycologists. The current BSMM Junior representative is Dr Margherita Bertuzzi from the Manchester Fungal Infection group (MFIG).

Please connect with BSMM Junior on Twitter and Facebook using the links below:



<https://www.facebook.com/BSMM.Junior>



https://twitter.com/BSMM_Junior

We would like you the members to provide as much new material as possible to help ensure our society is dynamic, impactful and informative to the medical mycology community. Therefore, if you have material you wish to share about your public engagement, photos from meetings, or any

other relevant material then send it on to any one of the committee members.

Executive Committee Members

Current posts and tenures:

Neil Gow– President (2019-2022)
Rebecca Gorton– Secretary (2017-2021)
Caroline Moore– Treasurer (2017-2022)
Lewis White – Meetings Secretary (2018-2021)
Margherita Bertuzzi – Website and junior rep (2019-2021)
Clare Logan – Clinical junior rep (2019-2021)
Duncan Wilson – Executive member (2017-2020)
Rohini Manuel – Executive member (2018-2021)
David Moyes – Executive member (2019-2022)
Darius Armstrong-James – Local organiser 2020 (2018-2020)
Neil Gow and Adilia Warris – Local organiser 2021 (2019-2021)

In 2021, the society will be seeking for nominations for secretary, treasurer elect, meeting secretary, two executive committee members and Junior rep, to replace Rebecca Gorton, Lewis White, Rohini Manuel, Duncan Wilson and Margherita Bertuzzi.

BSMM membership

The society has on record 272 members currently. The membership database will undergo a review in the summer of 2021 once the charity CIO conversion is complete.

We currently have membership applications for 2021 from six new/renewing members: Olivia Paulin (London), Emily Priest (London), Vicki Flemming (Nottingham), Tara Ahmed Abdul Hameed (London), Jonathan Lambourne (London), Antzela Tsavou (London).

Items for the next BSMM Newsletter

If you have any ideas, reviewed a mycology book, or come across anything that would be of interest to our community, and would be suitable for publication in the BSMM Newsletter please email Dr Rebecca Gorton and Dr Margherita Bertuzzi at info.bsmm@gmail.com.

Forthcoming meetings

Please find a selection of some of the exciting meetings happening soon.

9th -12th July 2021

[31st European Congress of Clinical Microbiology & Infectious Diseases](#), virtual meeting

8th-11th October 2021

[10th Congress on Trends in Medical Mycology \(TIMM-10\)](#), Aberdeen, UK

8th -12th March 2022

[21st Congress of the International Society for Human and Animal Mycology](#), New Delhi, India

15th-20th March 2022

[31st Fungal Genetics Conference](#), Asilomar Conference Grounds, Pacific Grove, CA

14th-20th May 2022

Human Fungal Pathogen, Nice, France

25th -26th June 2022

[Cellular and Molecular Fungal Biology \(GRS\), Gordon Research Seminar](#), Holderness, NH, US

26th June – 1st July 2022

[Cellular and Molecular Fungal Biology, Gordon Research Conference](#), Holderness, NH, US

5th -8th March 2023

[16th European Conference on Fungal Genetics](#), Innsbruck, Austria

Minutes online AGM 12th December 2021

The minutes of the 2021 AGM will be circulated to all members in due course as part of the final transition update for the BSMM to a CIO.