September 30, 2026

CURRICULUM VITAE

KIRSTEN NIELSEN

PROFESSIONAL ADDRESS

Department of Biomedical Sciences and Pathobiology
Virginia Tech University
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IDENTIFYING INFORMATION

Education

Degree	Institution	Date Degree Granted
B.S.	Purdue University Biochemistry	1996
Ph.D. [R. Boston and G. Payne]	North Carolina State University Botany and Plant Pathology	2002
Postdoctoral fellowship [J. Heitman]	Duke University Molecular Genetics and Microbiology	2002-2007
Other Training		
Molecular Mycology Course	MBL, Woods Hole, MA	2002

Academic Appointments

Virginia Tech University	(2024 - Present)
Department of Biomedical Sciences and Pathobiology	
Full Professor with Tenure	2024 - Present
University of Minnesota, Twin Cities Campus,	(2007 - 2024)
Department of Microbiology and Immunology	
Full Professor with Tenure	2019 - Present
Associate Professor with Tenure	2013 - 2019
Assistant Professor on Tenure-track	2007 - 2013

Program Affiliations

Faculty Fellow, Office of Research and Innovation, VT	2024 - Present
Center for One Health Research, VT	2024 - Present
Center for Immunology, Medical School, UMN	2016 - 2025
Interdisciplinary Mycology Graduate Group (UMycoNET), UMN	2015 - 2025

Department of Microbiology and Immunology, Medical School, UMN	2007 - 2025
Program in Infection and Immunity, Medical School, UMN	2007 - 2025
Microbiology, Immunology and Cancer Biology Graduate Program, UMN	2007 - 2025

Visiting Professorships or Visiting Scholar Positions

Fulbright Senior Scholar - Australia University of Queensland, Australian Infectious Diseases Center and School of Chemistry and Molecular Biosciences	2016
Fulbright Regional Award – Vietnam Oxford University Clinical Research Unit	2016 (September)
Fulbright Regional Award– Singapore Agency for Science, Technology, and Research (A*STAR)	2016 (November)

Consulting Positions

Scientific Consultant, Zepto Life Technologies	2020 – 2021
Scientific Consultant, 3M Corporation	2016 – 2018

Current Membership and Offices in Professional Organizations

International Society for Human and Animal Mycoses (ISHAM)	2010 – Present
Genetics Society of America (GSA) ***DeLill-Nasser Award Committee 2014 – 2017***	2008 – Present
American Assoc. for the Advancement of Science (AAAS)	2006 – Present
American Society for Microbiology (ASM) ***Academy of Microbiology Elections Committee 2022 – 2026***	2002 – Present

HONORS AND AWARDS FOR RESEARCH WORK, TEACHING, PUBLIC ENGAGEMENT, AND SERVICE

External Sources

American Society of Microbiology Distinguished Lecturer	***2026***
American Academy of Microbiology	***2021***
"Expert in Cryptococcosis", Expertscape (Top 1% based on PubMed)	2020, 2021
Sigma Xi Scientific Research Honor Society	2019
Fulbright Senior Scholar	***2016***
Fulbright Regional Award – Vietnam	2016
Fulbright Regional Award – Singapore	2016
Cell Biology Novel and Newsworthy Top Pick	***2009***
American Society for Microbiology Women's Career Development Award	***2006***
NIH T32 Molecular Mycology and Pathogenesis Training Program Postdoctoral Fellow	2005 – 2007
Howard Hughes Postdoctoral Fellow	2002 – 2005
Bryden Research Award, North Carolina Academy of Science	***2002***
Maize Genetics Conference Travel Award	2002, 1998
NSF/DOE/USDA Graduate Fellowship, North Carolina State University	1997 – 1999

Internal Sources

Research Excellent Award	**2025**
Thank a Mentor, VT	2024
CTSI Mentor of the Year, Honorable Mention, UMN	2017, 2020
HHMI Faculty Fellow for Inclusive Excellence, UMN	***2017 – 2018***
"Thank a Teacher" Award, UMN	2018, 2022

RESEARCH AND SCHOLARSHIP

Grants and Contracts

External Sources (federal or state grants, foundation awards, etc.)

Current Research Support

1. Principal Investigator
   R01AI176922
   National Institutes of Health
   "Continuum of Immune Responses to *Cryptococcus neoformans*"
   04/2023 – 03/2028
2. Principal Investigator
   R01NS10875
   National Institutes of Health
   "Genomic Research Capacity Building for Cryptococcosis Translational Studies"
   09/01/2020 – 08/31/2030
3. Principal Investigator
   R01AI134636
   National Institutes of Health
   "Impact of *Cryptococcus* titan cells on pathogenesis"
   04/25/2018 - 06/30/2029
4. Co-Principal Investigator
   R56AI177505
   National Institutes of Health
   "Ionic liquids to improve oral bioavailability and in vivo efficacy of oxfendazole"
   09/17/2026 – 08/31/2027

Pending Research Support

5. Co-Principal Investigator
   R01AI206087
   "Identifying conserved and unique regulators of cell size control in an HIV associated fungal pathogen"
   04/01/2027 – 03/31/2032

Current Training Support

6. Faculty Mentor
   Principal Investigator: Jovany Betancourt (MD/PhD Student)

F31AI181528 - Individual
National Institutes of Health
"Understanding granuloma formation during latent cryptococcosis"
08/01/2024 - 07/30/28

Past Training Support

7. Faculty Mentor
   Principal Investigator: Minna Ding (MD/PhD Student)
   F30AI155292 – Individual
   National Institutes of Health
   "The adaptive host response to latent cryptococcosis"
   10/01/2021 – 09/30/2025
8. Co-Faculty Mentor
   Contact Principal Investigator: Elizabeth Okafor (MD/PhD Student)
   F31AI162230 - Individual (minority-targeted funding)
   National Institutes of Health
   "NK cell cytotoxicity against *Cryptococcus neoformans* in persons with advanced HIV and cryptococcal meningitis"
   10/01/2021 – 09/30/2025
9. Co-Principal Investigator (MPI)
   Contact Principal Investigator: David Greenstein
   K12GM119955
   National Institutes of Health
   "The Minnesota IRACDA Program"
   07/2022 – 06/2027
10. Faculty Mentor
    Contact Principal Investigator: Katrina Jackson (PhD Student)
    F31AI148047 – Individual
    National Institutes of Health
    "Single nucleotide variations account for strain specific virulence changes in *Cryptococcus neoformans*"
    08/26/2019 – 07/31/2022
11. Co-Director and Faculty Mentor (Sophie Altamirano, Postdoctoral Fellow, "The cell cycle of *Cryptococcus neoformans* titan cells" 2018-2021)
    Contact Principal Investigator: David Greenstein
    K12GM119955 (IRADCA minority targeted funding)
    National Institutes of Health
    "Training Research Educators in Minnesota (TREM) Whilst Increasing Diversity"
    07/01/2017 – 3/31/2022
12. Faculty Mentor (Minna Ding, MD/PhD student, "Immune response during latent *Cryptococcus neoformans* infections" and Elizabeth Okafor, MD/PhD student, "Role of NK cells in patients with cryptococcal meningitis")
    Contact Principal Investigator: Yoji Shimizu
    T32GM008244

National Institutes of Health
"Medical Scientist Training Program"
07/01/1988 – 06/30/2025

13. Faculty Mentor (Caleb Skipper, Medical Fellow, "Cryptococcal meningitis patients in Uganda" 2018-2021)
Contact Principal Investigator: David Boulware
T32AI055433
National Institutes of Health
"Infectious Disease Training in Clinical Investigation"
09/01/2003 – 06/30/2025

14. Faculty Mentor (Caleb Skipper, Medical Fellow, "HLA Types in Cryptococcal Disease in Uganda" 2020, Liliane Mukaremera, Post-doctoral Fellow, "Immune Response to *Cryptococcus* Titan Cells" 2016)
Contact Principal Investigator: Joseph Zunt
D43TW009345 - Fogarty
National Institutes of Health
"Northern/Pacific Universities Global Health Research Training Consortium"
04/04/2012 – 06/30/2027

15. Faculty Mentor (Issa Mutyaba 2023 "Role of the SP140 gene during *Cryptococcus neoformans* infection in mice"; Amera Hassan 2021 "Differential killing of Cryptococcus clinical isolates by human NK cells"; Pavithra Ramakrishnan 2019 "Mapping the cryptic journey of *Cryptococcus* to the brain"; Katelyn Pastick 2018 "Human CD4+ T-cell polarization during *Cryptococcus* infection")
Contact Principal Investigator: Daniel Mueller
T35AI118620
National Institutes of Health
"Medical Student Summer Research Program in Infection and Immunity"
07/01/2015 – 06/30/2025

Past Research Support

16. Co-Principal Investigator
Contact Principal Investigator: David Boulware
R13AI152884
National Institutes of Health
"11th International Conference on *Cryptococcus* and Cryptococcosis (ICCC)"
02/01/2022 – 01/31/2023

17. Principal Investigator
00056860
US Centers for Disease Control (CDC) / Minnesota Department of Health
"Collaborative Blastomycosis Project"
04/07/16 – 12/31/21

18. Principal Investigator
Appili Therapeutics, Inc.

"Activity of T-2307 against fluconazole resistant clinical isolates of *Cryptococcus neoformans*"
01/01/2021 – 6/31/2021

19. Co-Principal Investigator
Contact Principal Investigator: Liliane Mukaremera
Medical Research Council (UK) – MRes
"Impact of antifungal treatment on cell wall synthesis in drug resistant and sensitive *C. neoformans* strains"
11/15/2020 – 06/15/2021

20. Principal Investigator
R21NS10875
National Institutes of Health
"Genomic Research Capacity Building for Cryptococcosis Translational Studies"
06/01/2018 – 08/31/2020 (2 month NCE)

21. Principal Investigator
R21AI122352
National Institutes of Health
"Control of cryptococcal infection through manipulation of the host immune response"
01/01/2016 – 06/31/2018

22. Co-Investigator
Contact Principal Investigator: David Boulware
R01NS086312
National Institutes of Health
"Improving diagnostics and neurocognitive outcomes in HIV/AIDS-related meningitis"
09/01/2013 – 06/30/2018

23. Principal Investigator
R01AI080275
National Institutes of Health
"Pheromones and titan cell production in *Cryptococcus neoformans*"
03/15/2011 - 01/31/2017

24. Co-Investigator
Contact Principal Investigator: Chaoyang Xue
R21AI113368
National Institutes of Health
"Mechanism of GPCR signaling mediated fungal cell gigantism"
06/15/2014 – 05/31/2017

25. Co-Principal Investigator (MPI)
Contact Principal Investigator: David Boulware
U01AI089244
National Institutes of Health
"Cryptococcal optimal ART timing trial"

07/15/2010 - 07/14/2015

26. Principal Investigator
    Viamet Pharmaceuticals, Inc
    "Activity of VT-129 against *C. neformans* clinical isolates with high fluconazole MICs"
    04/01/2015 – 12/31/2015

27. Principal Investigator
    K22AI070152 Career Transition Award
    National Institutes of Health
    "A link between mating pheromone sensing and virulence of *Cryptococcus neoformans*"
    08/18/2008 - 08/30/2011

University Sources

Current Support

1. Principal Investigator
   "VT Start-up Funds"
   08/01/2024 – 07/31/2027

Past Support

2. Co-Principal Investigator
   CeZAP Interdisciplinary Team-Building Pilot Grant
   "Developing triclabendazole as a briad-spectrum antifungal"
   07/01/2025 – 06/30/2026

3. Principal Investigator
   "Dean's Commitment"
   01/22/2022 - 08/01/2024

4. Principal Investigator
   "Dean's Additional R01 Award"
   12/30/2020 – 01/01/2021

5. Principal Investigator
   UMN Medical School / University Medical Foundation Bridge Grant
   "Pathogenesis of cryptococcal titan cells"
   12/01/2016 – 09/31/18

6. Principal Investigator
   UMN Academic Health Center BSL3 Grant
   "Identification of *Blastomyces* in soil using molecular methods"
   01/30/2014 – 09/30/2014

7. Principal Investigator
   UMN Office of International Programs Major International Grant
   "Ecology of *Cryptococcus neoformans* in sub-Saharan Africa"
   04/15/2010 - 10/01/2012

8. Principal Investigator
   UMN Academic Health Center Seed Grant
   "Immune response to titan cells"
   08/01/2010 – 07/31/2012

9. Principal Investigator
   UMN OVPR Grant-in-Aid
   "Titan cell production in *Cryptococcus neoformans*"
   01/01/2010 – 06/30/2011

10. Principal Investigator
    UMN Office of International Programs Research Circle Grant
    "Environmental Transmission of the AIDS-associated Pathogen *Cryptococcus neoformans* in sub-Saharan Africa"
    04/15/2008 – 04/30/2009

Patents

BIOAVAILABILITY ENHANCING IONIC LIQUID FORMULATIONS INCLUDING ANTHELMINITIC BENZIMIDAZOLE COMPOUNDS AND USES THEREOF
US Patent Application No: 19/493431 Filed: 15-Dec-2025 National Entry of: PCT/US2024/035152 Filed: 22-Jun-2024

Publications

Manifold Impact Analytics for Career

h-index	*h(fl)-index*	*Total Publications Analyzed*	*First/Last Author Publications Analyzed*	*Total Citations*	*First/Last Author Citations*
38	22	72	37	4997	2385

NIH iCite Impact Analytics for Career (1995-2023)

Publications Analyzed	*Mean Relative Citation Ratio (RCR)*[1]	*Weighted RCR*[2]
78	2.71	211

NIH iCite Impact Analytics while an independent investigator (2007-2023)

Publications Analyzed	*Mean Relative Citation Ratio (RCR)*[1]	*Weighted RCR*[2]	*First/Last Author Publications Analyzed*	*First/Last Author Mean RCR*[1]	*First/Last Author Weighted RCR*[2]
66	2.8	179	31	3.0	89

[1] RCR is a field-normalized metric used by the NIH that shows the citation impact relative to the average publication. A publication with RCR of 1 has received the same number of citations/year as the average paper in its field. A publication with RCR <1 has fewer citations than the field average. A publication with RCR of 2.0 had twice as many citations/year, etc. Publications with more than two times as many citations/year as the average paper in the field are highlighted in blue (RCR>2.0) and publications with four times as many citations/year are highlighted in yellow (RCR >4.0).

[2] Weighted RCR is the sum of publication RCRs. A highly influential set of articles will have a higher Weighted RCR than total publications, while a set of articles with below-average influence will have a lower Weighted RCR than total publications.

* Indicates members of the Nielsen laboratory on the publication

\+ Indicates the designated authors contributed equally.

Peer-Reviewed Publications

1. *Ding M, Drnevich J, *Yoder JM, Dang EV, **Nielsen K**. 2026. Paradoxical Th1 activation and CTLA-4 regulation is beneficial during latent cryptococcosis. ***mBio***, 12;17(8):e0152826. PMID: 42484324

   Corresponding author, guarantor of integrity of entire study, defined intellectual content, develop study concept and design, wrote and edited manuscript
   Journal Impact Factor: 5.9

Times Cited: N/A
RCR: N/A

2. *Skipper CP, Dai B, *Borges B, Augusto DG, Gerlach E, Tukundane A, Tadeo K, Pastick KA, Williams DA, Kabahubya M, Rajasingham R, Nalintya E, Meya DB, Boulware DR, Hollenbach J, **Nielsen K**. 2026. Investigation of human leukocyte antigen alleles as risk factors for cryptococcal disease in Ugandan individuals with HIV. ***Human Immunology***, 87(8):111788. PMID: 42289175

   Corresponding author, guarantor of integrity of entire study, defined intellectual content, develop study concept and design, wrote and edited manuscript
   Journal Impact Factor: 2.7
   Times Cited: N/A
   RCR: N/A

3. Zheng Y, Pierre MJ, Ansaldo E, Dobson H, Kamenyeva O, Onyishi C, Douglas S, Aldana CF, Zerk PE, Sereti I, *Betancourt J, **Nielsen K**, McCaffrey E, Dang E. 2026. Alternatively activated monocyte-derived myeloid cells promote extracellular pathogen persistence in pulmonary fungal granulomas. ***Journal of Experimental Medicine,*** 223(5):e20260208. PMID: 42008293

   Responsible for aspects of study using the wild-type clinical isolate UgCl223.
   Journal Impact Factor: 13.9
   Times Cited: N/A
   RCR: N/A

4. *Betancourt JJ, McAlister JA, Perez JM, Meya DB, Thomas SN, Geddes-McAlister J, **Nielsen K**. 2025. Global proteomic analysis of *Cryptococcus neoformans* clinical strains reveals significant differences between latent and lethal infection***.*** ***mSystems***, 10(10):e0075125. PMID: 40996037

   Corresponding author, guarantor of integrity of entire study, defined intellectual content, develop study concept and design, wrote and edited manuscript
   Journal Impact Factor: 6.4
   Times Cited: N/A
   RCR: N/A

5. *Betancourt JJ, **Nielsen K**. 2025. Insights from Mass Spectrometry-Based Proteomics on *Cryptococcus neoformans*. ***Journal of Fungi*** ,11(7):529. PMID: 40985422

   Corresponding author, guarantor of integrity of entire study, defined intellectual content, develop study concept and design, wrote and edited manuscript
   Journal Impact Factor: 4.3
   Times Cited: N/A

6. Kassaza K, Wasswa FB, **Nielsen K**, Bazira J. 2025. Ex Vivo Cytokine Profiling of *Cryptococcus neoformans* Strains Suggests Strain-Specific Immune Modulation: A Cross-Sectional Study. ***Cureus***, 17(7):e87404. PMID: 40772174

   Provided reagents and intellectual input.
   Journal Impact Factor: 1.3
   Times Cited: N/A

RCR: N/A

7. Wasswa FB, Kassaza K, **Nielsen K**, Bazira J. 2025. An Optimized In-House Protocol for Cryptococcus neoformans DNA Extraction from Whole Blood: Comparison of Lysis Buffer and Ox-Bile Methods. ***Journal of Fungi***, 11(6):430. PMID: 40558942

   Provided reagents and intellectual input.
   Journal Impact Factor: 1.3
   Times Cited: N/A
   RCR: N/A

8. *Ding M+,* Jackson KM+, *Harris-Gordon M, Dileepan T, Meya DB, and **Nielsen K**. 2024. The hypervirulent Type-1/Type-17 phenotype of *Cryptococcus neoformans* clinical isolates is specific to A/J mice. ***Infection & Immunity*****,** 93(4):e0058524**.** PMID: 40029251 PMID: 40071943

   Corresponding author, guarantor of integrity of entire study, defined intellectual content, develop study concept and design, wrote and edited manuscript
   Journal Impact Factor: 2.9
   Times Cited: N/A
   RCR: N/A

9. *Betancourt JJ+, *Ding M+, *Yoder JM, *Mutyaba I, Atkins HM, de la Cruz G, Meya DB, and **Nielsen K**. 2024 Pulmonary granuloma formation during latent *Cryptococcus neoformans* infection in C3HeB/FeJ mice involves progression through three immunological phases. ***MBio,*** 16(4):e0059525**.** PMID: 40071943

   Corresponding author, guarantor of integrity of entire study, defined intellectual content, develop study concept and design, wrote and edited manuscript
   Journal Impact Factor: 5.9
   Times Cited: N/A
   RCR: N/A

10. *Jackson KM, Kono TJY, *Betancourt JJ, Wang Y, *Kabbale KD, *Ding M, Kezh P, *Ha G, *Yoder JM, *Fulton SR, Mukaremera L, Tiffin P, Gusa A, Meya DB, Billmyre RB, Xue C, and **Nielsen K**. 2024. Single nucleotide polymorphisms are associated with strain-specific virulence differences among clinical isolates of *Cryptococcus neoformans*. ***Nature Communications***, 15(1):10491. PMID:39622806

    Corresponding author, guarantor of integrity of entire study, defined intellectual content, develop study concept and design, wrote and edited manuscript
    Journal Impact Factor: 14.7
    Times Cited: N/A
    RCR: N/A

11. *Jackson KM, *Kabbale KD, Macchietto M, Meya D, Tiffin P, Nielsen K. 2024. Virulence-associated variants in *Cryptococcus neoformans* sequence 93 are less likely to be associated with population structure compared to independent rare mutations. ***Microbiology Spectrum***, e170924.

    Corresponding author, guarantor of integrity of entire study, defined intellectual content, develop study concept and design, wrote and edited manuscript

Journal Impact Factor: 3.7
Times Cited: N/A
RCR: N/A

12. *Okafor EC and Nielsen K. 2024. State of the Field: Cytotoxic Immune Cell Responses in *C. neoformans* and *C. deneoformans* infection. ***Journal of Fungi***, 10(10):712.

Corresponding author, guarantor of integrity of entire study, defined intellectual content, develop study concept and design, wrote and edited manuscript
Journal Impact Factor: 5.82
Times Cited: N/A
RCR: N/A

13. *Ding M and **Nielsen K**. 2024. Inbred mouse models in *Cryptococcus neoformans* research. ***Journal of Fungi***, 10(6):426. PMID: 38921412

Responsible for all aspects of review; helped define review scope, co-wrote manuscript
Journal Impact Factor: 5.82
Times Cited: N/A
RCR: N/A

14. McHale TC, Akampurira A, *Gerlach ES, Mucunguzi A, Nicol MR, Williams DA, **Nielsen K**, Bicanic T, Fieberg A, Dai B, Meya DB, Boulware DR; ENACT Trial Team. 2023. 5-Flucytosine Longitudinal Antifungal Susceptibility Testing of Cryptococcus neoformans: A Substudy of the EnACT Trial Testing Oral Amphotericin. ***Open Forum Infectious Diseases***, 10(12):ofad596. PMID: 38143852

Responsible for aspects of study focused on drug resistance screening.
Journal Impact Factor: 3.66
Times Cited: N/A
RCR: 1.53 Provisional

15. *Jackson KM, *Ding M, and **Nielsen K**. 2023. The importance of clinical isolates in *Cryptococcus neoformans* research. ***Journal of Fungi***, 9(3):364. PMID: 36983532. (*co-corresponding authors)

Responsible for all aspects of review; helped define review scope, co-wrote manuscript
Journal Impact Factor: 5.82
Times Cited: N/A
RCR: 1.62 Provisional

16. Wasswa F, *Kassaza K, **Nielsen K†**, and Bazira J†. 2022. MinION Whole Genome Sequencing in Resource-Limited Settings: Challenges and Opportunities. ***Current Clinical Microbiology Reports,*** *9:52-59.* PMID: 36415776. (†co-corresponding authors)

Corresponding author, guarantor of integrity of entire study, defined intellectual content, develop study concept and design, wrote and edited manuscript
Journal Impact Factor: 5.27
Times Cited: N/A
RCR: 0.53

17. *Kassaza K, Wasswa F, **Nielsen K**†, and Bazira J†. 2022. *Cryptococcus neoformans* Genotypic Diversity and Disease Outcome among HIV Patients in Africa. ***Journal of Fungi**, 8(7):734.* PMID: 35887489 (†co-corresponding authors)

    Corresponding author, guarantor of integrity of entire study, defined intellectual content, develop study concept and design, wrote and edited manuscript
    Journal Impact Factor: 5.82
    Times Cited: N/A
    RCR: 0.81

18. *Atim PB, Meya DB†, *Gerlach ES, Muhanguzi D, Male A, Kanamwanji B, and **Nielsen K**†. 2022. Lack of association between fluconazole susceptibility and ERG11 nucleotide polymorphisms in *Cryptococcus neoformans* clinical isolates from Uganda. ***Journal of Fungi,** 8:508.* PMID: 35628763 (†co-corresponding authors)

    Corresponding author, guarantor of integrity of entire study, defined intellectual content, develop study concept and design, wrote and edited manuscript
    Journal Impact Factor: 5.82
    Times Cited: 2
    RCR: 1.15

19. *Ding M, Smith KS, Nielsen JN, Wiesner DL, Jackson KS and **Nielsen K**. 2022. Use of clinical isolates to establish criteria for a mouse model of latent *Cryptococcus neoformans* infection, ***Frontiers in Cellular and Infection Microbiology,** 11:804059.* PMID: 35186781

    Corresponding author, guarantor of integrity of entire study, defined intellectual content, developed study concept and design, wrote and edited manuscript
    Journal Impact Factor: 4.12
    Times Cited: N/A
    RCR: 1.88

20. *Altamirano DS+, *Li Z+, *Fu MS, *Ding M, *Fulton SR, *Yoder JM, *Tran V, and **Nielsen K**. 2021. The cyclin Cln1 controls polyploid titan cell formation following a stress-induced G2 arrest in Cryptococcus. ***MBio**,* 12: e02509-21. PMID: 34634930 (+authors contributed equally).

    Corresponding author, guarantor of integrity of entire study, defined intellectual content, developed study concept and design, wrote and edited manuscript
    Journal Impact Factor: 6.78
    Times Cited: 10
    RCR: 1.57

21. Sutar Y, *Fulton SR, Paul S, *Altamirano S, Mhatre S, Saeed H, Patel P, Mallick S, Bhat R, Patravale VB, Chauhan, **Nielsen K**†, and Date AA†. 2021. Docusate-based ionic liquids of anthelmintic benzimidazoles show improved pharmaceutical processability, lipid solubility, and *in vitro* activity against *Cryptococcus neoformans*, ***ACS Infectious Diseases,*** 7:2637-2649. PMID: 34467755 (†co-corresponding authors)

    Co-Corresponding author, guarantor of integrity of entire study, defined intellectual content for studies testing drug activity against Cryptococcus, developed study concept and design, wrote and edited manuscript

Journal Impact Factor: 4.61
Times Cited: 1
RCR: 1.25

22. *Gerlach ES, *Altamirano S, *Yoder JM, Luggya TS, Akampurira A, Meya DB, Boulware DR, Rhein J, and **Nielsen K.** 2021. ATI-2307 exhibits equivalent antifungal activity in *Cryptococcus neoformans* clinical isolates with high and low fluconazole IC_{50}. ***Frontiers in Cellular and Infection Microbiology,*** 11:695240. PMID: 34249782

Corresponding author, guarantor of integrity of entire study, defined intellectual content, developed study concept and design, wrote and edited manuscript
Journal Impact Factor: 4.12
Times Cited: 2
RCR: 0.74

23. *Jackson KM, Pelletier K, *Kerkeart J, Ireland M, *Robinson S, *McDonald TM, Bender J, Knight JF, Scheftel J, and **Nielsen K**. 2020. Analysis and modeling of *Blastomyces dermatitidis* environmental prevalence in Minnesota using soil collected at basal and outbreak sites. ***Applied and Environmental Microbiology***, 87:e01922-20. PMID: 33355116.

Corresponding author, guarantor of integrity of entire study, defined intellectual content, developed study concept and design, wrote and edited manuscript
Times cited: 1
Journal Impact Factor: 4.60
Times Cited: 2
RCR: 1.21

24. *Altamirano S+, *Jackson KM+, and **Nielsen K**. 2020. The interplay of phenotype and genotype in *Cryptococcus neoformans* disease. ***Bioscience Reports,*** 40: BSR20190337. PMID: 33021310 (+authors contributed equally).

Corresponding author, guarantor of integrity of review, defined intellectual content, wrote and edited manuscript
Times Cited:12
Journal Impact Factor: 2.94
RCR: 2.01

25. Alhadab AA, Rhein J, Tugume L, Musubire A, Williams DA, Abassi M, Nicol MR, Meya DB, Boulware DR, Brundage RC, ASTRO-CM Team (Ndyetukira JF, Ahimbisibwe C, Kugonza F, Namuju C, Sadiq A, Ssebambulidde K, Kiggundu R, Nabeta HW, Mpoza E, Akampurira A, Kandole TK, Luggya T, Kaboggoza J, Laker E, Muzoora C, Butler EK, Dyal J, Fujita AW, Stadelman A, Namudde A, Halupnick R, Jawed B, *Vedula P, Peterson M, *Smith KD, Bahr NC, Velamakanni SS, Fisher J, **Nielsen K**, Morawski BM, Hullsiek KH). 2019. Pharmacokinetics-pharmacodynamics of sertraline as an antifungal in HIV-infected Ugandans with cryptococcal meningitis. ***Journal of Pharmacokinetics and Pharmacodynamics***, 46:565-576. PMID: 31584146.

Collaborator, responsible for aspects of clinical trial and study design related to cryptococcal pathogenesis and laboratory culture.
Times Cited: 3

Journal Impact Factor: 2.46
RCR: 0.18

26. Zafar H, *Altamirano S, Ballou ER, and **Nielsen K**. 2019. A titanic drug resistance threat in *Cryptococcus neoformans*. ***Current Opinions in Microbiology,*** 52:158-164. PMID: 31765991.

Senior author, defined intellectual content, manuscript preparation and editing.
Times Cited: 17
Journal Impact Factor: 8.13
RCR: 2.77

27. *Gerstein AC, *Jackson KM, *McDonald TR, Wang Y, *Lueck BD, *Bohjanen S, *Smith KD, Akampurira A, Meya DB, Xue C, Boulware DR, and **Nielsen K**. 2019. Identification of pathogen genomic differences that impact human immune response and disease during *Cryptococcus neoformans* infection. ***MBio,*** 10:e01440-19. PMID: 31311883

Top 10 Most Downloaded MBio Paper in 2019 (published in July)
Highlighted in multiple popular press articles:
https://www.sciencedaily.com/releases/2019/07/190716073716.htm,
https://www.drugtargetreview.com/news/46584/gene-differences-that-impact-response-to-cryptococcus-identified/,
https://www.infectioncontroltoday.com/infectious-diseasesconditions/researcher-identifies-differences-genes-impact-response-Cryptococcus
Corresponding author, guarantor of integrity of entire study, defined intellectual content, developed study concept and design, wrote and edited manuscript
Times Cited: 18
Journal Impact Factor: 7.14
RCR: 2.47

28. Rhein J, Huppler Hullsiek K, Tugume L, Nuwagira E, Mpoza E, Evans EE, Kiggundu R, Pastick KA, Ssebambulidde K, Akampurira A, Williams DA, Bangdiwala AS, Abassi M, Musubire AK, Nicol MR, Muzoora C, Meya DB, Boulware DR, ASTRO CM Team (Ndyetukira JF, Ahimbisibwe C, Kugonza F, Namuju C, Sadiq A, Namudde A, Mwesigye J, Tadeo KK, Kirumira P, Okirwoth M, Luggya T, Kaboggoza J, Laker E, Atwine L, Muganzi D, Walukaga S, Jawed B, Merry M, Stadelman A, Stephens N, Flynn AG, Fujita AW, Kwizera R, *Mukaremera L, Lofgren SM, Cresswell FV, Morawski BM, Bahr NC, **Nielsen K**). 2019. Adjunctive sertraline for HIV-associated cryptococcal meningitis: a randomised, placebo-controlled, double-blind phase 3 trial. ***Lancet Infectious Diseases***, 19:843-851. PMID: 31345462

Recommended by Faculty of 1000 (https://facultyopinions.com/prime/736294233)
Collaborator, responsible for aspects of clinical trial and study design related to cryptococcal pathogenesis and laboratory culture.
Times Cited: 58
Journal Impact Factor: 25.15
RCR: 6.38 Provisional (Top 4% of NIH-funded research publications)

29. Ssebambulidde K, Bangdiwala AS, Kwizera R, Kandole TK, Tugume L, Kiggundu R, Mpoza E, Nuwagira E, Williams DA, Lofgren SM, Abassi M, Musubire AK, Cresswell FV, Rhein J, Muzoora C, Hullsiek KH, Boulware DR, Meya DB; ASTRO-CM Team (Nabeta HW, Ndyetukira JF, Ahimbisibwe C, Kugonza F, Namuju C, Sadiq A, Namudde A, Mwesigye J, Kirumira P, Okirwoth M, Akampurira A, Luggya T, Ellis J, Kaboggoza J, Laker E, Atwine L, Muganzi D, Evans EE, Velamakanni SS, Jawed B, *Pastick KA, Merry M, Stadelman A, Flynn AG, Fujita AW, *Mukaremera L, Morawski BM, Taseera K, **Nielsen K**, Bohjanen PR, Kambugu A). 2019. Symptomatic cryptococcal antigenemia Presenting as early cryptococcal meningitis with negative cerebral spinal fluid analysis. ***Clinical Infectious Diseases***, 68:2094-2098. PMID: 30256903.

    Collaborator, responsible for aspects of clinical trial and study design related to cryptococcal pathogenesis and laboratory culture.
    Times Cited: 25
    Journal Impact Factor: 8.31
    RCR: 2.25

30. *Mukaremera L, *McDonald TR, Nielsen JN, *Molenaar CJ, Akampurira A, Schutz C, Taseera K, Muzoora C, Meintjes G, Meya DB, Boulware DR, and **Nielsen K**. 2019. The mouse inhalation model of *Cryptococcus neoformans* infection recapitulates strain virulence in humans and shows closely related strains can possess differential virulence. ***Infection and Immunity***, 87:e00046-19. PMID: 30833336

    Spotlighted in Infection and Immunity, 87:e00221-19.
    Recommended by Faculty of 1000 (https://facultyopinions.com/prime/735248670 - Faculty of 1000 is a research tool that highlights the most interesting research papers, based on the recommendations of over 1000 leading scientists)
    Corresponding author, guarantor of integrity of entire study, defined intellectual content, developed study concept and design, wrote and edited manuscript
    Times Cited:25
    Journal Impact Factor: 3.60
    RCR: 2.53

31. Tugume L, Rhein J, Hullsiek KH, Mpoza E, Kiggundu R, Ssebambulidde K, Schutz C, Taseera K, Williams DA, Abassi M, Muzoora C, Musubire AK, Meintjes G, Meya DB, Boulware DR: ASTRO-CM study team (Neabetta HW, Ndyetukira JF, Ahimbisibwe C, Kugonza F, Namuju C, Sadiq A, Namudde A, Mwesigye J, Kandole TK, Kwizera R, Kirumira P, Okirwoth M, Akampurira A, Luggya T, Kaboggoza J, Laker E, Atwine L, Muganzi D, Evans EE, Bridge SC, Velamakanni SS, Rajasingham R, Pastick K, Merry M, Stadelman A, Flynn A, Fujita AW, *Mukaremera L, Lofgren SM, Morawski BM, Taseera K, **Nielsen K**, Bohjanen PR, Kambugu A). (2019) HIV-associated cryptococcal meningitis occurring at relatively higher CD4 counts. ***Journal of Infectious Diseases***, 219: 877- 883. PMID: 30325463

    Responsible for aspects of over-arching clinical trial and study design related to cryptococcal pathogenesis.
    Times Cited: 30
    Journal Impact Factor: 5.23
    RCR: 2.74

32. Musubire AK, Meya DB, Rhein J, Meintjes G, Bohjanen PR, Nuwagira E, Muzoora C, Boulware DR, Huppler Hullsiek K, and the COAT and ASTRO Teams (Kiggundu R, Schutz C, Tugume L, Nabeta HW, Akampurira A, Williams DA, Abassi M, Taseera K, Ndyetukira JF, Ahimbisibwe C, Kugonza F, Sadiq A, Kandole TK, Luggya T, Pastick K, Kaboggoza J, Laker E, Rajasingham R, Bahr NC, Morawski B, Bridge S, Butler EK, Dyal J, Fujita AW, Yueh N, Bridge SC, Namudde A, Velamakanni SS, Jawed B, *Vedula P, **Nielsen K**, Kambugu A). (2018). Blood neutrophil counts in HIV-infected patients with cryptococcal meningitis: Association with mortality. ***PLoS One***, 13:e0209337. PMID: 30596708

    Responsible for aspects of over-arching clinical trial and study design related to cryptococcal pathogenesis.
    Times Cited: 11
    Journal Impact Factor: 3.35
    RCR: 1.08

33. Rhein J, Hullsiek KH, Evans EE, Tugume L, Nuwagira E, Ssebambulidde K, Kiggundu R, Mpoza E, Musubire AK, Bangdiwala AS, Bahr NC, Williams DA, Abassi M, Muzoora C, Mega DB, Boulware, DR: ASTRO-CM study team (Neabetta HW, Ndyetukira JF, Ahimbisibwe C, Kugonza F, Namuju C, Sadiq A, Namudde A, Mwesigye J, Kandole TK, Kirumira P, Okirwoth M, Akampurira A, Luggya T, Kaboggoza J, Laker E, Atwine L, Muganzi D, Velamakanni SS, Jawed B, Pastick K, Merry M, Stadelman A, Flynn A, Fujita AW, *Mukaremera L, Lofgren SM, Morawski BM, Taseera K, **Nielsen K**, Bohjanen PR, Kambugu A). (2018) Detrimental outcomes of unmasking cryptococcal meningitis with recent ART initiation. ***Open Forum Infectious Diseases***, 5:ofy122. PMID: 30094292

    Responsible for aspects of over-arching clinical trial and study design related to cryptococcal pathogenesis.
    Times Cited: 32
    Journal Impact Factor: 3.66
    RCR: 2.65

34. Diehl JW, Hullsiek KH, Okirwoth M, Stephens N, Abassi M, Rhein J, Meya DB, Boulware DR, Musubire AK, ASTRO-CM Trial Team (Mpoza E, Kiggundu R, Tugume L, Ssebambulidde K, Akampurira A, Kirumira P, Williams DA, Ndyetukira JF, Ahimbisibwe C, Kugonza F, Namuju C, Sadiq A, Kandole TK, Luggya T, Kaboggoza J, Laker E, Namudde A, Lofgren S, Kwizera R, **Nielsen K**, Stadelman A, Bangdiwala AS). (2018) Cerebral oximetry for detecting high-mortality risk patients with cryptococcal meningitis. ***Open Forum Infectious Diseases***, 5:ofy105. PMID: 29942819

    Responsible for aspects of over-arching clinical trial and study design related to cryptococcal pathogenesis.
    Times Cited: 8
    Journal Impact Factor: 3.66
    RCR: 0.53

35. Hommel B+, *Mukaremera L+, Cordero RJB, Coelho C, Desjardins CA, Sturny-Leclere A, Janbon G, Perfect JR, Fraser JA, Casadevall A, Cuomo CA, Dromer F, **Nielsen K**, and Alanio A. (2018) Titan cell formation in *Cryptococcus neoformans* is finely tuned by

environmental conditions and modulated by positive and negative genetic regulators. ***PLoS Pathogens***, 14:e1006982. PMID: 29775480 (+authors contributed equally)

Top 10% Most Cited PLoS Pathogens papers published in 2018
Responsible for all aspects of study related to in vitro titan cell production in different strains, in vivo titan cell production, defined in vivo study design, co-wrote manuscript. ***Dr. Nielsen declined official co-corresponding authorship on this manuscript to allow her more junior colleague Dr. Alanio to be the corresponding author.***
Times Cited:72
Journal Impact Factor: 6.96
RCR: 4.17 (Top 10% of NIH-funded research publications)

36. *Mukaremera L, Lee KK, Wagener J, *Wiesner DL, Gow NAR, and **Nielsen K.** (2018) Titan cell production in *Cryptococcus neoformans* reshapes the cell wall and capsule composition during infection. ***Cell Surface***, 1:15-24. PMID: 30123851

Corresponding author, guarantor of integrity of entire study, defined intellectual content, developed study concept and design, wrote and edited manuscript
Times Cited: 35
Journal Impact Factor: new journal, not yet indexed
RCR: 1.81

37. *Li Z, and **Nielsen K**. (2017) Morphology changes in human fungal pathogens upon interaction with the host. ***Journal of Fungi***, 3:66. PMID: 29333431

Corresponding author, defined intellectual content, manuscript preparation and editing.
Times Cited: 22
Journal Impact Factor: 4.62
RCR: 1.32

38. *Mukaremera L, and **Nielsen K**. (2017) Adaptive immunity to *Cryptococcus neoformans* infections. ***Journal of Fungi***, 3:64. PMID: 29333430

Corresponding author, defined intellectual content, manuscript preparation and editing.
Times Cited: 27
Journal Impact Factor: 4.62
RCR: 2.38

39. Hagen F, Lumbsch HT, Arsic Arsenijevic V, Badali H, Bertout S, Billmyre RB, Bragulat MR, Cabañes FJ, Carbia M, Chakrabarti A, Chaturvedi S, Chaturvedi V, Chen M, Chowdhary A, Colom MF, Cornely OA, Crous PW, Cuétara MS, Diaz MR, Espinel-Ingroff A, Fakhim H, Falk R, Fang W, Herkert PF, Ferrer Rodríguez C, Fraser JA, Gené J, Guarro J, Idnurm A, Illnait-Zaragozi MT, Khan Z, Khayhan K, Kolecka A, Kurtzman CP, Lagrou K, Liao W, Linares C, Meis JF, **Nielsen K**, Nyazika TK, Pan W, Pekmezovic M, Polacheck I, Posteraro B, de Queiroz Telles F Filho, Romeo O, Sánchez M, Sampaio A, Sanguinetti M, Sriburee P, Sugita T, Taj-Aldeen SJ, Takashima M, Taylor JW, Theelen B, Tomazin R, Verweij PE, Wahyuningsih R, Wang P, Boekhout T. (2017)

Importance of resolving fungal nomenclature: the case of multiple pathogenic species in the *Cryptococcus* genus. ***mSphere***, 2:e00238-17. PMID: 28875175

Helped define intellectual content, manuscript preparation and editing.
Times Cited: 75
Journal Impact Factor: 4.47
RCR: 5.47 (Top 10% of NIH-funded research publications)

40. Armstrong-James D, Bicanic T, Brown GD, Hoving JC, Meintjes G, and **Nielsen K.** (2017) AIDS-related mycoses: Current progress in the field and future priorities. ***Trends in Microbiology***, 25:428-430. PMID: 28454846

Co-author, helped define intellectual content, manuscript preparation and editing.
Times Cited: 12
Journal Impact Factor: 13.55
RCR: 0.61

41. Kwizera R, Akampurira A, Kandole TK, **Nielsen K**, Kambugu A, Meya DB, Boulware DR, and Rhein J. (2017) Evaluation of trypan blue strain in a hemocytometer for rapid detection of cerebrospinal fluid sterility in HIV patients with cryptococcal meningitis. ***BMC Microbiology***, 17:182. PMID: 28830348

Helped define intellectual content, helped develop study concept and design, helped write and edited manuscript
Times Cited: 7
Journal Impact Factor:3.38
RCR: 0.41

42. Ferreira-Paim K, Andrade-Silva L, Fonseca FM, Ferreira TB, Mora DJ, Andrade-Silva J, Khan A, Dao A, Reis EC, Almeida MT, Maltos A, Junior VR, Trilles L, Rickerts V, Chindamporn A, Sykes JE, Cogliati M, **Nielsen K**, Boekhout T, Fisher M, Kwon-Chung J, Engelthaler DM, Lazéra M, Meyer W, Silva-Vergara ML. (2017) MLST-based population genetic analysis in a global context reveals clonality amongst *Cryptococcus neoformans* var. *grubii* VNI isolates from HIV patients in southeastern Brazil. ***PLoS Neglected Tropical Diseases***, 11:e0005223. PMID: 28099434

Top 10% Most Cited PLoS NTD papers published in 2017
Provided critical data, helped write and edited manuscript
Times Cited: 43
Journal Impact Factor: 4.72
RCR: 3.1

43. *Wiesner DL, *Smith KD, Kashem SW, Bohjanen PR, **Nielsen K**. (2017) Different lymphocyte populations direct dichotomous eosinophil or neutrophil responses to pulmonary *Cryptococcus* infection. ***Journal of Immunology***, 198:1627-1637. PMID: 28069805

Corresponding author, guarantor of integrity of entire study, defined intellectual content, developed study concept and design, wrote and edited manuscript
Times Cited: 21
Journal Impact Factor: 5.05

RCR: 1.15

44. *Gerstein AC, and **Nielsen K.** (2017) It's not all about us: evolution and maintenance of Cryptococcus virulence requires selection outside the human host. ***Yeast***, 34:143-154. PMID: 27862271

    Corresponding author, defined intellectual content, co-wrote and edited manuscript.
    Times Cited: 9
    Journal Impact Factor: 3.14
    RCR: 0.54

45. **Nielsen K**, *Vedula P, *Smith KD, Meya DB, Garvey EP, Hoekstra WJ, Schotzinger RJ, Boulware DR. (2016) Activity of VT-1129 against *Cryptococcus neoformans* clinical isolates with high fluconazole MICs. ***Medical Mycology***, 55:453-456. PMID: 27664991

    Corresponding author, guarantor of integrity of entire study, defined intellectual content, developed study concept and design, wrote and edited manuscript
    Times Cited: 22
    Journal Impact Factor: 2.99
    RCR: 1.15

46. Homer CM, Summers D, Goranov AI, Clarke SC, *Wiesner DL, Diedrich JK, Moresco JJ, Tofaletti D, Upadhya R, Caradonna I, Petnic S, Lodge JK, Perfect JR, Yates JR, **Nielsen K**, Craik, C, and Madhani, HD. (2016) Intracellular action of a secreted peptide required for fungal virulence. ***Cell Host and Microbe***, 19(6):849-64. PMID: 27212659

    Recommended by Faculty of 1000 (https://facultyopinions.com/prime/726375295)
    Responsible for aspects of study related to adaptive immune response, helped with manuscript preparation and editing
    Times Cited: 52
    Journal Impact Factor: 17.87
    RCR: 2.45

47. Rhein J, Morawski BM, Huppler Hullseik K, Nabeta HW, Kiggundu R, Tugume L, Musubire A, Akampurira A, *Smith KD, Alhadab A, Willimans DA, Abassi M, Bahr NC, Velamakanni SS, Fisher J, **Nielsen K**, Meya DB, Boulware DR. (2016) Efficacy of adjunctive sertraline for the treatment of HIV-associated cryptococcal meningitis: an open-label dose-ranging study. ***Lancet Infectious Diseases***, 16(7):809-18. PMID: 26971081

    Recommended by Faculty of 1000 (https://facultyopinions.com/prime/726215276)
    Responsible for sertraline drug resistance testing, helped with manuscript preparation and editing
    Times Cited: 119
    Journal Impact Factor: 25.15
    RCR: 7.0 (Top 4% of NIH-funded research publications)

48. Boulware DR, von Hohenberg M, Rolfes MA, Bahr NC, Rhein J, Akampurira A, Williams DA, Taseera K, Schutz C, *McDonald T, Muzoora C, Meintjes G, Meya DB, **Nielsen K**, Huppler Hullsiek K. (2016) Human immune response varies by the degree of relative cryptococcal antigen shedding. ***Open Forum Infectious Diseases***, 3:ofv194. PMID: 26807426

Responsible for determination of genetic background for Cryptococcus strains and some cryptococcal antigen measurements, helped with manuscript preparation and editing
Times Cited: 14
Journal Impact Factor: 3.66
RCR:0.73

49. May RC, Stone NR, *Wiesner DL, Bicanic T, and **Nielsen K**. (2015) Cryptococcus: from environmental saprophyte to global pathogen. ***Nature Reviews Microbiology***, 14:106-17. PMID: 26685750

Recommended by Faculty of 1000 (https://facultyopinions.com/prime/726028483)
Co-senior author, defined intellectual content, co-wrote and edited manuscript.
Times Cited: 237
Journal Impact Factor: 36.88
RCR: 14.27 (Top 1% of NIH-funded research publications)

50. *Gerstein AC, *Fu MS, *Mukaremera L, *Li Z, Ormerod KL, Fraser JA, Berman J, and **Nielsen K**. (2015) Polyploid titan cells produce haploid and aneuploidy progeny to promote stress adaptation. ***MBio***, 6:e01340-15. PMID: 26463162

Corresponding author, guarantor of integrity of entire study, defined intellectual content, developed study concept and design, wrote and edited manuscript
Times Cited: 90
Journal Impact Factor: 7.14
RCR: 4.17 (Top 10% of NIH-funded research publications)

51. *Wiesner DL, *Smith KD, Kotov DI, Nielsen, JN, Bohjanen PR, and **Nielsen K.** (2015) Regulatory T cell induction and retention in the lung is necessary for suppression of detrimental type-2 helper T cells during pulmonary cryptococcal infection. ***Journal of Immunology***, 196(1):365-74. PMID: 26590316

Corresponding author, guarantor of integrity of entire study, defined intellectual content, developed study concept and design, wrote and edited manuscript
Times Cited: 31
Journal Impact Factor: 5.05
RCR: 1.29

52. *Smith+ KD, *Achan+ B, *McDonald T, *Okagaki-Vraspir L, Akampurira A, Huppler-Hullsiek K, Meya DB, Boulware DR, and **Nielsen K.** (2015) Increased antifungal drug resistance in Ugandan clinical isolates of *Cryptococcus neoformans*. ***Antimicrobial Agents and Chemotherapy*****,** 59:7197-204. PMID: 26324276 (+authors contributed equally)

Corresponding author, guarantor of integrity of entire study, defined intellectual content, developed study concept and design, wrote and edited manuscript
Times Cited: 110
Journal Impact Factor: 4.90
RCR: 6.39 (Top 5% of NIH-funded research publications)

53. *Wiesner DL, Specht CA, Lee KO, *Smith KD, Lee CG, *Mukaremera L, Lee ST, Lee CG, Elias JA, Nielsen JN, Boulware DR, Bohjanen PR, Jenkins MK, Levitz SM, and

Nielsen K. (2015) Chitin recognition via chitotriosidase promotes pathologic type-2 helper T cell responses to cryptococcal infection. ***PLoS Pathogens***, 11:e1004701. PMID: 25764512

Corresponding author, guarantor of integrity of entire study, defined intellectual content, developed study concept and design, wrote and edited manuscript
Times Cited: 118
Journal Impact Factor: 6.96
RCR: 5.18 (Top 10% of NIH-funded research publications)

54. Evans, RJ, *Li, Z, Hughes, WS, Djordjevic, JT, **Nielsen, K**, and May, RC. (2015) Cryptococcal phospholipase B1 is required for intracellular proliferation and control of titan cell morphology during macrophage infection. ***Infection and Immunity***, 83:1296-304. PMID: 25605772

Responsible for all titan cell studies, defined titan cell study design, co-wrote and edited manuscript.
Times Cited: 30
Journal Impact Factor: 3.60
RCR: 1.58

55. Nelson, RW, Beisang, D, Tubo, NJ, Dileepan, T, *Wiesner, DL, **Nielsen, K**, Wuthrich, M, Klein, BB, Kolov, DI, Spanier, JA, Fife, BT, Moon, JJ, and Jenkins, MK. (2015) T Cell receptor cross-reactivity between similar foreign and self peptides influences naïve cell population size and autoimmunity. ***Immunity***, 42:95-107. Erratum, 42:1213-1213. PMID: 25601203

Recommended by Faculty of 1000 (https://facultyopinions.com/prime/725324023)
Provided critical reagent, edited manuscript.
Times Cited: 104
Journal Impact Factor:25.73
RCR: 2.87

56. Katchanov J, Blechschmidt C, **Nielsen K**, Branding G, Arastéh K, Tintelnot K, Meintjes G, Boulware DR, and Stocker H. (2015) Cryptococcal meningoencephalitis relapse after an 8-year delay: An interplay of infection and immune reconstitution. ***International Journal of STD and AIDS***, 26(12):912-4. PMID: 25505049

Provided intellectual guidance for study, helped write and edit manuscript.
Times Cited: 12
Journal Impact Factor: 1.49
RCR: 0.72

57. Boulware D, Meya D, Muzoora C, Rolfes M, Huppler-Hullsiek K, Musubire A, Taseera K, Nabeta H, Schutz C, Williams D, Rajasingham R, Rhein J, Thienemann F, Lo M, **Nielsen K**, Bergemann T, Kambugu A, Manabe Y, Janoff E, Bohjanen P, and Meintjes G. (2014) Timing of antiretroviral therapy after diagnosis of cryptococcal meningitis. ***New England Journal of Medicine***, 370:2487-98. PMID: 24963568

Cited in 2021 and 2018 WHO HIV-treatment guidelines (https://apps.who.int/iris/handle/10665/342899; https://apps.who.int/iris/handle/10665/260399)
Recommended by Faculty of 1000 (https://facultyopinions.com/prime/718467599)

Responsible for microbiological aspects of clinical trial, responsible for study design and data analysis related to cryptococcal pathogenesis, helped write and edit manuscript.
Times Cited: 316
Journal Impact Factor: 79.26
RCR: 13.49 (Top 1% of NIH-funded research publications)

58. Janbon G, Ormerod KL, Paulet D, Byrnes EJ, Chatterjee G, Yadav V, Hon C-C, Billmyre RB, Brunel F, Bahn Y-S, Chen W, Chen Y, Chow EWL, Coppée J-Y, Floyd-Averette A, Gaillardin A, Gerik KJ, Goebels C, Goldberg J, Gonzalez-Hilarion S, Gujja S, Hamlin JL, Hsueh Y-P, Ianiri G, Jones S, Kodira CD, Lam W, Marra M, Mesner LD, Mieczkowski PA, Moyrand F, **Nielsen K**, Proux C, Rossignol T, Schein JE, Sun S, Wood IA, Zeng Q, Neuvéglise C, Newlon CS, Perfect JR, Lodge JK, Idnurm A, Stajich JE, Kronstad JW, Sanyal K, Heitman J, Fraser JA, Cuomo CA, and Dietrich FS. (2014) Analysis of the genome and transcriptome of *Cryptococcus neoformans* var. *grubii* reveals complex RNA expression and microevolution leading to virulence attenuation. ***PLoS Genetics***, 10:e1004261. PMID: 24743168

Top 10% Most Cited PLoS Genetics papers published in 2014
Recommended by Faculty of 1000 (https://facultyopinions.com/prime/718355371)
Provided critical data on heredity and inter-relatedness of Cryptococcus strains used in the study, helped write and edit the manuscript.
Times Cited: 252
Journal Impact Factor: 8.56
RCR: 9.58 (Top 2% of NIH-funded research publications)

59. Chen Y, Toffaletti DL, Tenor JL, Litvintseva AP, Fang C, Mitchell TG, *McDonald TR, **Nielsen K**, Boulware DR, Bicanic T, and Perfect JR. (2014) The *Cryptococcus neoformans* transcriptome at the site of human meningitis. ***MBio*** 5:e01087-13. PMID: 24496797

Highlighted in MBio 5:01097
Recommended by Faculty of 1000 (https://facultyopinions.com/prime/718266659)
Provided critical data on genetic background of clinical isolates used in the study., helped write and edit the manuscript.
Times Cited: 76
Journal Impact Factor: 7.14
RCR: 3.05

60. Brown GD, Meintjes G, Kolls JK, Gray C, Horsnell W, Working Group from the EMBO-AIDS Related Mycoses Workshop, Achan B, Alber G, Aloisi M, Armstrong-James D, Beale M, Bicanic T, Black J, Bohjanen P, Botes A, Boulware DR, Brown G, Bunjun R, Carr W, Casadevall A, Chang C, Chivero E, Corcoran C, Cross A, Dawood H, Day J, De Bernardis F, De Jager V, De Repentigny L, Denning D, Eschke M, Finkelman M, Govender N, Gow N, Graham L, Gryschek R, Hammond-Aryee K, Harrison T, Heard N, Hill M, Hoving JC, Janoff E, Jarvis J, Kayuni S, King K, Kolls J, Kullberg BJ, Lalloo DG, Letang E, Levitz S, Limper A, Longley N, Machiridza TR, Mahabeer Y, Martinsons N, Meiring S, Meya D, Miller R, Molloy S, Morris L, *Mukaremera L, Musubire AK, Muzoora C, Nair A, Nakiwala Kimbowa J, Netea M, **Nielsen K**, O'hern J, Okurut S,

Parker A, Patterson T, Pennap G, Perfect J, Prinsloo C, Rhein J, Rolfes MA, Samuel C, Schutz C, Scriven J, Sebolai OM, Sojane K, Sriruttan C, Stead D, Steyn A, Thawer NK, Thienemann F, Von Hohenberg M, Vreulink JM, Wessels J, Wood K, Yang YL. (2014) AIDS-related mycoses: the way forward. ***Trends in Microbiology***, 22:107-9. PMID: 24581941

Provided guidance of topics to be included in the position paper, feedback and editing of final manuscript
Times Cited: 22
Journal Impact Factor: 13.55
RCR: 0.96

61. Zaragoza O, and **Nielsen K**. (2013) Titan cells in *Cryptococcus neoformans*: cells with a giant impact. ***Current Opinions in Microbiology***, 16:409-413 PMID: 23588027

Co-author, defined intellectual content, co-wrote and edited manuscript.
Times Cited: 116
Journal Impact Factor: 8.13
RCR: 4.28 (Top 10% of NIH-funded research publications)

62. *Wiesner+ DL, *Moskalenko+ O, Corcora, JM, *McDonald T, Rolfes MA, Meya DB, Kajumbula H, Knight JF, Boulware DR, and **Nielsen K.** (2012) Cryptococcal genotype influences immunologic response and human clinical outcome after meningitis. ***mBio*****,** 3:e00196-12. PMID: 23015735 (+authors contributed equally)

Best Paper 2012-2014, International Cryptococcus and Cryptococcosis Meeting 2014
Recommended by Faculty of 1000 (https://facultyopinions.com/prime/717997706)
C*orresponding author, guarantor of integrity of entire study, defined intellectual content, developed study concept and design, wrote and edited manuscript*
Times cited: 68
Journal Impact Factor: 7.14
RCR: 2.91

63. *McDonald T, *Weisner DL, and **Nielsen K**. (2012) Cryptococcus. ***Current Biology***, 22:R554-555. PMID: 22835785

Corresponding author, defined intellectual content, co-wrote and edited manuscript.
Times cited: 5
Journal Impact Factor: 10.17
RCR: 0.22

64. *Crabtree+ JH, *Okagaki-Vraspir+ LH, *Strain AK, Nielsen JN, and **Nielsen K**. (2012) Titan cell production enhances virulence of *Cryptococcus neoformans*. ***Infection and Immunity***, 80:3776-378. PMID: 22890995 (+authors contributed equally)

Corresponding author, guarantor of integrity of entire study, defined intellectual content, developed study concept and design, wrote and edited manuscript
Times cited: 83
Journal Impact Factor: 3.60
RCR: 3.0

65. *Okagaki-Vraspir LH, and **Nielsen K.** (2012) Titan cells confer protection from phagocytosis in *Cryptococcus neoformans* infections. *Eukaryotic Cell*, 11:820-826. PMID: 22544904

    Highlighted in Microbe, 7:320
    Highlighted in Nature Reviews Microbiology, 10:376
    Spotlighted in Eukaryotic Cell 11:707
    Multiple Popular Press Articles:
    http://www.medicalnewstoday.com/releases/245923.php
    https://www.sciencedaily.com/releases/2012/05/120528100727.htm,
    https://phys.org/news/2012-05-titan-cells-cryptococcus.html,
    http://www.labspaces.net/120476/Study_finds_titan_cells_protect_Cryptococcus

    Corresponding author, guarantor of integrity of entire study, defined intellectual content, developed study concept and design, wrote and edited manuscript
    Times cited: 103
    Journal Impact Factor: 3.89
    RCR: 3.9 (Top 10% of NIH-funded research publications)

66. Jung KW, *Strain AK, **Nielsen K**, Jung KH, and Bahn YS. (2012) Two cation transporters Ena1 and Nha1 cooperatively modulate ion homeostasis, antifungal drug resistance, and virulence of *Cryptococcus neoformans* via the HOG pathway. ***Fungal Genetics and Biology***, 49:332-345. PMID: 22343280

    Responsible for all aspects of study related to virulence, defined virulence study design, co-wrote manuscript
    Times Cited: 35
    Journal Impact Factor: 3.58
    RCR: 1.23

67. Yang DH, Maeng JW, Kim MS, Yoon JK, White TC, Floyd A, Heitman J, *Strain AK, Nielsen JN, **Nielsen K**, and Bahn YS. (2012) Pleiotropic roles of the Msi1-like protein Msl1 in *Cryptococcus neoformans*. ***Eukaryotic Cell***, 11:1482-1495. PMID: 23042129

    Responsible for all aspects of study related to virulence, defined virulence study design, helped write and edit the manuscript
    Times Cited: 8
    Journal Impact Factor: 3.89
    RCR: 0.22

68. Morrow CA, Lee IR, Chow EW, Ormerod KL, Goldinger A, Byrnes EJ, **Nielsen K**, Heitman J, Schirra HJ, and Fraser JA. (2012) A unique chromosomal rearrangement in the *Cryptococcus neoformans var. grubii* type strain enhances key phenotypes associated with virulence. ***MBio***, 3:e00310-11. PMID: 22375073

    Recommended by Faculty of 1000 (https://facultyopinions.com/prime/713947903)
    Generated strains used in the study, co-wrote manuscript
    Times Cited: 26
    Journal Impact Factor: 7.14
    RCR: 0.86

69. Song MH, Lee JW, Kim MS, Yoon JK, White TC, Floyd A, Heitman J, *Strain AK, Nielsen JN, **Nielsen K**, and Bahn YS. (2012) A flucytosine-responsive Mbp1/Swi4-like protein, Mbs1, plays pleiotropic roles in antifungal drug resistance, stress response, and virulence of *Cryptococcus neoformans*. ***Eukaryotic Cell***, 11:53-67. PMID: 22080454

    Responsible for all aspects of study related to virulence, defined virulence study design, co-wrote manuscript
    Times Cited: 28
    Journal Impact Factor: 3.89
    RCR: 1.04

70. *Okagaki-Vraspir LH, Wang Y, Ballou ER, O'Meara TR, Bahn YS, Alspaugh JA, Xue C, and **Nielsen K**. (2011) Cryptococcal titan cell formation is regulated by G-protein signaling in response to multiple stimuli. ***Eukaryotic Cell***, 10:1306-16. PMID: 21821718

    Spotlighted in Microbe, 6:497
    Spotlighted in Eukaryotic Cell, 10:1269
    Corresponding author, guarantor of integrity of entire study, defined intellectual content, developed study concept and design, wrote and edited manuscript
    Times Cited: 82
    Journal Impact Factor: 3.89
    RCR: 2.44

71. Kim SY, Ko YJ, Jung KW, *Strain AK, **Nielsen K**, and Bahn YS. (2011) Hrk1 plays both Hog1-dependent and -independent roles in controlling stress response and antifungal drug resistance in *Cryptococcus neoformans*. ***PLoS One***, 6:e18769. PMID: 21533251

    Responsible for all aspects of study related to virulence, defined virulence study design, co-wrote manuscript
    Times Cited: 21
    Journal Impact Factor: 3.35
    RCR: 0.81

72. Jung K-W, Kim S-Y, *Okagaki-Vraspir LH, **Nielsen K**, and Bahn YS. (2011) Ste50 adaptor protein governs sexual differentiation of *Cryptococcus neoformans* via the pheromone response MAPK signaling pathway. ***Fungal Genetics and Biology***, 48:154-165. PMID: 20971202

    Responsible for all aspects of study related to virulence, defined virulence study design, co-wrote manuscript
    Times Cited: 36
    Journal Impact Factor: 3.58
    RCR:0.99

73. *Okagaki-Vraspir+ LH, *Strain+ AK, Charlier C, Nielsen JN, *Baltes NJ, Chretien F, Heitman J, Dromer F, and **Nielsen K**. (2010) Cryptococcal cell morphology affects host cell interactions and pathogenicity. ***PLoS Pathogens***, 6:e10000953. PMID: 20585559 (+authors contributed equally)

    Top Ten Paper, International Society of Human and Animal Mycology (ISHAM), 2012
    Recommended by Faculty of 1000
    (https://facultyopinions.com/prime/3866963)

Highlighted in mSphere Commentary, 2020 (https://msphere.asm.org/content/5/1/e00948-19)
Corresponding author, guarantor of integrity of entire study, defined intellectual content, developed study concept and design, wrote and edited manuscript
Times Cited: 245
Journal Impact Factor: 6.96
RCR: 7.29 (Top 4% of NIH-funded research publications)

74. Desnos-Ollivier M, Patel S, *Spaulding AR, Charlier C, Garcia-Hermos, D, **Nielsen K**, and Dromer F. (2010) Mixed infections and in vivo evolution in the human fungal pathogen *Cryptococcus neoformans*. ***mBio***, 1:e00091-10. PMID: 20689742

Designated as mBio Editors' Pick
Recommended by Faculty of 1000 (https://facultyopinions.com/prime/4799956)
Responsible for aspects of study related to mixed infections, involved in intellectual content, developed strains and study design, co-wrote manuscript
Times Cited: 73
Journal Impact Factor: 7.14
RCR: 2.36

75. Charlier C, **Nielsen K**, Daou S, Brigitte M, Chretien F, and Dromer F. (2009) Evidence for a role of monocytes in dissemination and brain invasion by *Cryptococcus neoformans*. ***Infection and Immunity***, 77:120-127. PMID: 18936186

Spotlighted in Infection and Immunity, 77: 21-22
Co-defined intellectual content, study design, co-wrote manuscript
Times Cited: 248
Journal Impact Factor: 3.60
RCR: 7.18 (Top 4% of NIH-funded research publications)

76. Lin X, **Nielsen K**, Patel S, and Heitman J. (2008) Impact of mating type, serotype, and ploidy on virulence of *Cryptococcus neoformans*. ***Infection and Immunity***, 76:2923-38. PMID: 18426889

Developed concept and design, conducted experimental studies, analyzed data, involved in manuscript preparation
Times Cited: 58
Journal Impact Factor: 3.60
RCR: 1.5

77. Rutherford JC, Lin X, **Nielsen K**, and Heitman J. (2007) The Amt2 permease is required to induce ammonium responsive invasive growth and mating in *Cryptococcus neoformans*. ***Eukaryotic Cell***, 7:223-236. PMID: 18055915

Responsible for aspects of study related to virulence, defined virulence study design and performed virulence experiments, involved in manuscript preparation
Times Cited: 42
Journal Impact Factor: 3.89
RCR: 1.01

78. Lin X, Litvintseva AP, **Nielsen K**, Patel S, Kapadia Z, Floyd A, Mitchell TG, and Heitman J. (2007) αADα hybrids of *Cryptococcus neoformans*: evidence of same sex mating in nature and hybrid fitness. ***PLoS Genetics***, 3:1975-1990. PMID: 17953489

    Responsible for aspects of study related to virulence, defined virulence study design and performed virulence experiments, involved in manuscript preparation
    Times Cited: 108
    Journal Impact Factor: 8.56
    RCR: 2.6

79. **Nielsen K**, De Obaldia AL, and Heitman J. (2007). Differences in mating of Cryptococcus species on pigeon guano defines their ecological niche. ***Eukaryotic Cell***, 6:949-959. PMID: 17449657

    Recommended by Faculty of 1000 (https://facultyopinions.com/prime/1081889)
    Developed study design, defined intellectual content, conducted experimental studies, analyzed data, wrote and edited manuscript
    Times Cited: 127
    Journal Impact Factor: 3.89
    RCR: 3.26

80. Steinbach WJ, Cramer RA, Perfect BZ, Henn C, **Nielsen K**, Heitman J, and Perfect JR. (2007) Calcineurin inhibition or mutation enhances cell wall inhibitors against *Aspergillus fumigatus*. ***Antimicrobial Agents and Chemotherapy***, 51:2979-2981. PMID: 17502415

    Conducted microscopy experiments, involved in manuscript preparation
    Times Cited: 83
    Journal Impact Factor: 4.50
    RCR: 2.12

81. **Nielsen K,** and Heitman J. (2007) Sex and virulence of human fungal pathogens. ***Advances in Genetics***, 57:143-173. PMID: 17352904

    Defined intellectual content, co-wrote and edited manuscript
    Times Cited: 92
    Journal Impact Factor: 4.86
    RCR: 2.28

82. **Nielsen K**, Marra RE, Hagen F, Boekhout T, Mitchell TG, Cox GM, and Heitman J. (2005) Interaction between genetic background and the mating type locus in *Cryptococcus neoformans* virulence potential. ***Genetics***, 171:975-983. PMID: 15965241

    Developed study design, defined intellectual content, conducted experimental studies, analyzed data, wrote and edited manuscript
    Times Cited: 61
    Journal Impact Factor: 5.08
    RCR: 1.60

83. **Nielsen K**, Cox GM, Litvintseva AP, Mylonakis E, Malliaris SD, Benjamin DK, Giles SS, Mitchell TG, Casadevall A, Perfect JR, and Heitman J. (2005) *Cryptococcus*

neoformans α strains preferentially disseminate to the central nervous system during coinfection. ***Infection and Immunity***, 73:4922-3933. PMID: 16041006

Developed study design, defined intellectual content, conducted experimental studies, analyzed data, wrote and edited manuscript
Times Cited: 96
Journal Impact Factor: 3.60
RCR: 2.51

84. Idnurm A, Bahn Y-S, **Nielsen K,** Lin X., Fraser J.A., and Heitman J. (2005) Deciphering the model pathogenic fungus *Cryptococcus neoformans*. ***Nature Reviews Microbiology***, 3:753-764. PMID: 16132036

Involved in intellectual content, co-wrote and edited manuscript
Times Cited: 241
Journal Impact Factor: 36.88
RCR: 5.46 (Top 10% of NIH-funded research publications)

85. Toffaletti DL, **Nielsen K**, Dietrich F, Heitman J, and Perfect JR. (2004*) Cryptococcus neoformans* mitochondrial genomes from serotype A and D strains do not influence virulence. ***Current Genetics***, 46:193-204. PMID: 15309505

Designed and constructed strains used in study, involved in manuscript preparation
Times Cited: 37
Journal Impact Factor: 3.71
RCR: 0.82

86. Marra RE, Huang JC, Fung E, **Nielsen K**, Michell TG, Heitman J, and Vilgalys R. (2004) A genetic linkage map of *Cryptococcus neoformans* (*Filobasidiella neoformans*) var. *neoformans*. ***Genetics***, 167:619-631. PMID: 15238516

Designed and constructed strains used in study, involved in study design and manuscript preparation
Times Cited: 48
Journal Impact Factor: 5.08
RCR: 1.17

87. Nielsen K, Cox GM, Wang P, Toffaletti DL, Perfect JR, and Heitman J. (2003) Sexual cycle of *Cryptococcus neoformans variety grubii* and virulence of congenic a and α isolates. *Infection and Immunity*, 71:4831-4841. PMID: 12933823

Chosen as Top Ten Paper by Faculty of 1000 (https://facultyopinions.com/prime/1015308)
Highlighted in Infection and Immunity, 71:4829-4830
Developed study design, defined intellectual content, conducted experimental studies, analyzed data, wrote and edited manuscript
Times Cited: 289
Journal Impact Factor: 3.60
RCR: 6.66 (Top 4% of NIH-funded research publications)

88. Litvintseva AP, Marra RE, **Nielsen K**, Heitman J, Vilgalys R, and Mitchell TG. (2003) Evidence of sexual recombination among *Cryptococcus neoforman*s serotype A isolates in sub-saharan Africa. ***Eukaryotic Cell***, 2:1162-1168. PMID: 14665451

    Generated some strains used in study, performed mating studies and analyzed data, involved in study design and manuscript preparation
    Times Cited: 113
    Journal Impact Factor: 3.89
    RCR: 2.41

89. **Nielsen K,** and Boston R.S. (2001) Ribosome-inactivating proteins: A plant perspective. ***Annual Review in Plant Physiology and Plant Molecular Biology***, 52:785-816. PMID: 11337416

    Defined intellectual content, co-wrote manuscript
    Times Cited: 229
    Journal Impact Factor: 17.37
    RCR: 3.63

90. **Nielsen K**, Payne GA, and Boston RS. (2001) Maize ribosome-inactivating protein inhibits normal development of *Aspergillus nidulans* and *Aspergillus flavus*. ***Molecular Plant-Microbe Interactions***, 14:164-172. PMID: 11204779

    Developed study design, defined intellectual content, conducted experimental studies, analyzed data, co-wrote and edited manuscript
    Times Cited: 47
    Journal Impact Factor: 4.28
    RCR: 0.87

91. Suckow MA, Bowersock TL, **Nielsen K**, and Grigdesby CF. (1996) Enhancement of respiratory immunity to *Pasteurella multocida* by cholera toxin in rabbits. ***Laboratory Animals***, 30:120-126. PMID: 8783172

    Conducted experimental studies
    Times Cited: 15
    Journal Impact Factor: 1.12
    RCR: 0.59

92. Suckow MA, Bowersock TL, **Nielsen K**, Chrisp CE, Frandsen PL, and Janovitz EB. (1995) Protective immunity of *Pasteurella multocida* heat-labile toxin by intranasal immunization in rabbits. ***Laboratory Animal Science***, 45:526-532. PMID: 8569151

    Conducted experimental studies
    Times Cited: 13
    Journal Impact Factor: 1.44
    RCR: 0.54

Manuscripts in Preparation

93. Sutar Y , *Fulton SR, **Nielsen K**†, Date A†, and. Oxfendazole Docusate-based ionic liquid shows enhanced *in vivo* efficacy against *Cryptococcus neoformans*, ***in preparation for submission to Nature Communications.*** (†co-corresponding authors)

    Responsible for all aspects of study related to in vitro and in vivo testing of novel compounded drugs for antifungal activity against C. neoformans, helped defined study design, co-wrote manuscript
    Journal Impact Factor: 14.14

Non-Peer-Reviewed Publications

94. **Nielsen K**, and *Okagaki-Vraspir LH. (2017) A microbial death star. ***ASM Blog***, 16:57.

    Corresponding author, defined intellectual content, co-wrote and edited manuscript

95. Rhein J, **Nielsen K**, Boulware DR, and Meya DB. (2016) Sertraline for HIV-associated cryptococcal meningitis – Author's reply. ***Lancet Infectious Diseases***, 16:1111–1112.

    Co-author, defined intellectual content, co-wrote and edited manuscript

96. **Nielsen K**. (2008) Sex, Mating and Evolution. ***European Confederation of Medical Mycology Newsletter***, 1:20.

    Wrote and edited manuscript

97. **Nielsen K**. (2005) Sex, signaling, and the mating type locus. ***European Confederation of Medical Mycology Newsletter***, 1:18.

    Wrote and edited manuscript

Chapters in Books

98. **Nielsen K,** and Bennett RJ. (2012) Discovery of extant sexual cycles in human pathogenic fungi and their roles in generation of diversity and virulence. *In "Evolution of Virulence in Eukaryotic Microbes"*, eds. LD Sibley, BJ Howlett, and J Heitman, John Wiley & Sons, Inc.

    Corresponding author, defined intellectual content, co-wrote and edited manuscript

99. **Nielsen K**., and Kwon-Chung K. J. (2010) A role for mating in cryptococcal virulence. *In* "*Cryptococcus: from human pathogen to model yeast"*, J. Heitman, T. Kozel, K.J. Kwon-Chung, J. Perfect, and A. Casadevall eds., ASM Press

    Corresponding author, defined intellectual content, co-wrote and edited manuscript

100. Mitchell T.G., Castaneda E, **Nielsen K**, Wanke B, and Lazera M.S. (2010) Environmental niches for *Cryptococcus*. *In* "*Cryptococcus: from human pathogen to model yeast"*, J. Heitman, T. Kozel, K.J. Kwon-Chung, J. Perfect, and A. Casadevall eds., ASM Press.

    Co-author, defined intellectual content, co-wrote and edited manuscript

Presentations

Invited Oral Presentations and Seminars at International Professional Meetings, Conferences, Universities, etc.

1. "Altered cell cycle regulation promotes morphology changes in *Cryptococcus neoformans*", FASEB Chromosome Biology and Cell States in Yeasts and FASEB Cell States Joint Meeting Session, Niagra Falls, NY, 2026
2. "The biological function of Cryptococcus titan cells", 12th International Cryptococcus and Cryptococcosis Conference, Exeter, UK, 2026
3. **Keynote Address**, "The Sands of Time – Latent Cryptococcus Infections", Gordon Research Seminar, Los Angeles, CA, 2025
4. **Keynote Address,** "Lord of the Genes", Keystone Symposium on Fungal Pathogens, Banff, CA, 2024
5. "Unraveling the genetic determinants of virulence in Cryptococcus", 21st Congress of the International Society for Human and Animal Mycoses (ISHAM), New Delhi, India, 2022 (K. Jackson represented K. Nielsen due to COVID-19)
6. "*Cryptococcus* Cell Wars: The Ultimate Battle Between Host and Pathogen", MycoTalks International Virtual Seminar Series - hosted by University of Exeter, Exeter, United Kingdom, 2021
7. "*Cryptococcus neoformans*: When bad yeast get worse", School of Biological Sciences, University of Edinburgh, Scotland, United Kingdom, 2019
8. "*Cryptococcus neoformans* genomic polymorphisms that impact human disease outcome", 3rd Conference on AIDS-related Mycoses, Cape Town, South Africa, 2019
9. "Cell Wars – A Yeast Death Star", EMBO Workshop on Experimental Approaches to Evolution and Ecology, Heidelberg, Germany, 2018
10. "Cell Wars – The Microbial Death Star", 7th FEBS Advanced Lecture Course on Human Fungal Pathogens, Nice, France, 2017
11. "Cell Wars – The Fungal Menace", Institute of Microbiology and Infection, University of Birmingham, Birmingham, United Kingdom, 2017
12. "Microbial X-Men - Generation of Diversity in *Cryptococcus*", Singapore Immunology Network, Agency for Science, Technology, and Research; Singapore, 2016
13. "Microbial X-Men - Generation of Diversity in *Cryptococcus*", Departments of Botany and Genetics (Joint Invitation), University of Melbourne, Australia, 2016
14. "*Cryptococcus neoformans* titan cells fool the host immune system", 2nd EMBO conference on AIDS-related mycoses, Cape Town, South Africa 2016 (L. Mukaremera represented K. Nielsen)
15. "Microbial X-Men - Generation of Diversity in *Cryptococcus*", School of Chemistry and Molecular Biosciences, University of Queensland, Brisbane, Australia, 2016

16. "Hunting for the ecological niche of human fungal pathogens", Queensland Alliance for Agriculture and Food Innovation, University of Queensland, Brisbane, Australia, 2016
17. "Polyploid titan cells promote stress adaptation through production of genetically diverse progeny", 19th Congress of the International Society for Human and Animal Mycology, Melbourne, Australia, 2015
18. "Cryptococcal Titan Cells – What are they and how do they affect pathogenesis", Australian Infectious Diseases Centre, University of Queensland, Brisbane, Australia, 2015
19. "The role of titan cells during infection", 9th International Congress on *Cryptococcus* and Cryptococcosis, Amsterdam, Netherlands, 2014
20. "Cryptococcal strain variation as a determinant of patient mortality after meningitis", EMBO Conference on AIDS Associated Mycoses, Cape Town, South Africa 2013
21. "The impact of titan cell production on pathogenesis", 8th International Conference on *Cryptococcus* and Cryptococcosis, Charleston, SC, 2011
22. "Understanding cryptococcal pathogenesis: from the clinic to the lab and back again", Medical Microbiology Department, Makerere University, Kampala, Uganda 2011
23. "The search for an environmental niche for *Cryptococcus neoformans* in East Africa", Kenya Medical Research Institute, Nairobi, Kenya, 2010
24. "Mating and virulence of the human pathogenic fungus *Cryptococcus neoformans*", Infectious Diseases Institute, Makerere University, Kampala, Uganda 2008
25. "Cell dissemination to the central nervous system during coinfection", 7th International Conference on *Cryptococcus* and Cryptococcosis, Nagasaki, Japan, 2008
26. "Pheromone sensing inhibits *Cryptococcus neoformans* cell dissemination to the central nervous system during coinfection", 16th Congress of the International Society for Human and Animal Mycology, Paris, France, 2006
27. "Mating in Serotype A – Virulence of congenic **a** and α isolates", 3rd International *Cryptococcus neoformans* Genome Conference, Vancouver, BC, Canada, 2003
28. "Analysis of the sexual cycle of *Cryptococcus neoformans variety grubii*", Human Fungal Pathogens – EuroConference on Host-Pathogen Interactions, Giens, France, 2003

Invited Oral Presentations and Seminars at National Professional Meetings, Conferences, Universities, etc.

1. **Juneann Murphy Memorial Seminar,** "Lord of the Genes", Oklahoma Health Sciences Center, OK, 2025

2. **Keynote Address,** "Lord of the Genes", Cell Biology of Eukaryotic Pathogens Conference, Clemson, SC, 2025
3. **"**Dynamic immune responses control latent Cryptococcus infections", Symposium on Cytokines in Antifungal Hose Defenses, National Institutes of Health, Bethesda, MD, 2024
4. "Lord of the Genes", Duke University, Durham, NC, 2023
5. "Cell Wars – the ultimate battle between host and pathogen", Virginia Tech University, Blacksburg, VA, 2023
6. "Cell Wars – the ultimate battle between host and pathogen", University of Michigan, Ann Arbor, MI, 2023
7. "Cryptococcal Genotypes: Do they mean anything to the clinician?", Mycology Study Group Education and Research Conference (MSGERC) Biennial Meeting, Albuquerque, NM, 2022 (*postponed from 2020 due to Covid-19*)
8. **"**Cryptococcosis: The ultimate battle between host and microbe", University of Tennessee Health Sciences Center, Memphis, TN, 2022
9. "Cryptococcosis: The ultimate battle between host and microbe", University of Oklahoma, Stillwater, OK, 2022
10. "The many morphologies of *Cryptococcus neoformans*", 25th Anniversary Symposium, MBL Molecular Mycology Course, Woods Hole, MA, 2021
11. **"**Cryptococcosis: The ultimate battle between host and microbe", Clemson University (Virtual), 2021
12. "The many morphologies of *Cryptococcus neoformans*, Medical Mycology Society of America Annual Meeting (Virtual), 2021
13. Cellular and Molecular Fungal Biology Gordon Research Conference, Holderness, NH, June 2020, ***cancelled due to Covid-19***
14. University of Connecticut, CT, 2020, ***cancelled due to Covid-19***
15. "*Cryptococcus* Cell Wars", The Ohio State University, OH, 2020
16. "*Cryptococcus* Cell Wars – When a Bad Yeast gets Worse", Molecular Mycology Course, Marine Biology Laboratory, Woods Hole, MA, 2019
17. **"***Cryptococcus* Titan Cells", FASEB Microbial Pathogenesis Conference: Mechanisms of Infectious Disease, Snowmass, CO, 2019
18. **"***Cryptococcus neoformans* genomic polymorphisms impact human disease outcome", Fogarty FIC Global Brain Network Meeting, National Institutes of Health, Bethesda, MD, 2019
19. **Keynote Address**, "Cell Wars – The Fungal Menace", Buffalo Conference on Microbial Pathogenesis, Buffalo, NY, 2017
20. "Cell Wars – The Fungal Menace", Department of Medicine, University of Massachusetts, Boston, MA, 2017

21. **Plenary Address** "When Bad Yeast Get Worse – *Cryptococcus* Titan Cells", 29th Fungal Genetics Conference, Pacific Grove, CA, 2017
22. "Cell Wars – The Fungal Menace", Department of Pathology, University of Utah, Salt Lake City, UT, 2017
23. "Jekyll and Hyde - Dual Roles of T-Cell Activation in *Cryptococcus* Infection", Immunology of Fungal Infections Gordon Research Conference, Galveston, Texas, 2017
24. "Cell Wars – The Fungal Menace", Department of Pathology, University of Utah, Salt Lake City, UT, 2017
25. "Altered host response due to titan cell formation promotes cryptococcal dissemination", Cellular and Molecular Fungal Biology Gordon Research Conference, Holderness, NH, 2016
26. "Chitin triggers pathologic Th2 responses to cryptococcal infection", Immunology of Fungal Infections Gordon Conference, Galveston, TX, 2015
27. "Cryptococcal Titan Cells – What are they and how to they affect pathogenesis", Washington University, St. Louis, MO, 2015
28. "How do fungi change morphology and genetically resist the host and its treatment: The titan cell story", Interscience Conference on Antimicrobial Agents and Chemotherapy, Washington, DC, 2014
29. "Cryptococcal strain variation as a determinant of immune response and patient mortality after meningitis", Interscience Conference on Antimicrobial Agents and Chemotherapy, Denver, CO, 2013
30. **Keynote Address**, "Cryptococcal strain variation as a determinant of immune response and patient mortality", South Central Medical Mycology Association Conference, Houston, TX, 2013
31. "Cryptococcal Titan Cells: When bad yeast get worse", Department of Microbiology and Molecular Genetics, University of Texas-Houston Medical School, Houston, TX, 2013
32. "Fear the Titans: When Bad Yeast Get Worse", Northern Illinois University, DeKalb, IL, 2013
33. "Morphology changes affect pathogenesis of *Cryptococcus neoformans*", Molecular and Cellular Fungal Biology Gordon Conference, Holderness, NH, 2012
34. "The immune response to *Cryptococcus neoformans*: Good vs. Bad", Department of Molecular Genetics and Microbiology, Duke University, Durham, NC, 2012
35. "Cryptococcal infections: animal welfare and model considerations", Research Triangle Laboratory Animal Training Program, University of North Carolina, Chapel Hill, NC, 2012
36. "Cryptococcal titan cell formation affects interactions with the host and subsequent pathogenesis", Department of Biology, University of Texas - San Antonio, TX, 2012

37. "Cryptococcal titan cell formation enhances virulence", 112th General Meeting of the American Society for Microbiology, San Francisco, CA, 2012
38. "Fear the Titans: When Bad Yeast Get Worse", Duke Symposium in Celebration of Mycology and Mycologists, Durham, NC, 2012
39. "Cryptococcal titan cell formation affects interactions with the host and subsequent pathogenesis", Keystone Symposium on Fungal Pathogens: From Basic Biology to Drug Discovery, Santa Fe, NM, 2012
40. "Interaction between cryptococcal titan cells and the innate immune system affects pathogenesis", Immunology of Fungal Infections Gordon Research Conference, Galveston, TX, 2011
41. "Giant cell virulence in *Cryptococcus*", 25th Fungal Genetics Conference, Pacific Grove, CA, 2009
42. "Dissemination of *Cryptococcus neoformans* to the central nervous system during coinfection", Cellular and Molecular Fungal Biology Gordon Research Conference, Holderness, NH, 2008
43. "A role for mating in virulence of the human pathogenic fungus *Cryptococcus neoformans",* Department of Biomedical Sciences, Oregon State University, Corvallis, OR, 2006
44. "Differential response of pathogenic and non-pathogenic fungi to maize ribosome-inactivating protein", 42nd Annual Maize Genetics Conference, Coeur d'Alene, ID, 2000

Invited Oral Presentations and Seminars at Local and Regional Professional Meetings, Conferences, Universities, etc.

1. **ASM Distinguished Lecture**, "One Gene to Rule Them All? A Lord of the Rings Host-Pathogen Interaction", Western New York ASM Branch Meeting, Buffalo, NY 2026
2. "Polyploid titan cells enhance genetic diversity during Cryptococcus infection through unique cell cycle regulation", College of Biological Sciences, Virginia Tech, Blacksburg, VA 2026
3. "Long-term Patterns of Fungal Disease Incidence in the New River Valley and Southwestern Virginia", Infectious Disease Grand Rounds, Virginia Tech Carilion School of Medicine, Roanoke, VA 2026
4. "Development of Anthelmentic Benzamidazoles as Antifungals: Can we do better?", Virginia Drug Discovery Consortium Meeting, Virginia Beach, VA 2025
5. "Lord of the Genes", Department of Biomedical Sciences and Pathobiology, Virginia Tech, Blacksburg, VA 2025
6. "Ratchet Up Your Grant Writing: A funder-agnostic approach to a successful proposal", Office of Research and Innovation, Virginia Tech, Blacksburg, VA 2025

7. "An Insider's Guide to NIH R-Series Grants", Office of Research and Innovation, Virginia Tech, Blacksburg, VA 2025
8. "Translational Research on the human fungal pathogen *Cryptococcus neoformas*", Undergraduate Global Health Club, University of Minnesota, Minneapolis, MN, 2022
9. "Tips and Tricks for Running a Research Lab", Early Pathways to Career Success Program, Center for Women in Medicine and Science, Medical School, University of Minnesota, Minneapolis, MN, 2021
10. "Understanding NIH R-series Study Sections: Everything You Wanted To Know But Where Afraid To Ask", Department of Pediatrics Retreat, Medical School, University of Minnesota, Minneapolis, MN, 2021
11. "Understanding NIH R-series Study Sections: Everything You Wanted To Know But Where Afraid To Ask", Office of Faculty Affairs Professional Development Series, Medical School, University of Minnesota, Minneapolis, MN, 2020
12. "Immunology of *Cryptococcus* infections", Immunology T35 Training Program, University of Minnesota, Minneapolis, MN, 2019
13. "Cell Wars – The Fungal Menace", Department of Biology, Macalester College, Minneapolis, MN, 2018
14. "When Bad Yeast Get Worse – *Cryptococcus* Titan Cells", Immunology Grand Rounds, Mayo Clinic, Rochester, MN, 2017
15. "Secondary Metabolism in Filamentous Fungi", 3M, St Paul, MN, 2017
16. "Mycology" 3M, St. Paul, MN, 2015
17. "Cryptococcal Titan Cells – What are they and how do they affect pathogenesis", Saint Catherine University, St. Paul, MN, 2015
18. "When bad yeast get worse", Graduate Women in Science, Minneapolis, MN, 2012
19. "Reducing cryptococcal mortality rates with microbiology, ecology, and medicine", Addressing Global Challenges Through International Research Conference, Minneapolis, MN, 2012
20. "Reducing cryptococcal mortality rates with microbiology, ecology, and medicine", Biology Department, University of Minnesota – Duluth, MN, 2011
21. **"**Fear the Titans: Identification of a new cell type during cryptococcosis", Biology Department, Hamline University, Minneapolis, MN, 2010
22. "Cryptococcal meningitis: from the lungs to the brain", Medical School, University of Minnesota – Duluth, MN, 2010
23. "*Cryptococcus neoformans* dissemination during infection", 15th Annual Midwest Microbial Pathogenesis Conference, Madison, WI, 2008
24. "A role for mating in virulence of the human pathogenic fungus *Cryptococcus neoformans*", Department of Microbiology, University of Minnesota, Minneapolis, MN, 2006

25. "*Cryptococcus neoformans* α strains preferentially disseminate to the central nervous system during coinfection", NC ASM Branch Meeting, Raleigh, NC, 2005
26. "Response of pathogenic and non-pathogenic fungi to maize ribosome-inactivating protein", North Carolina Academy of Science Annual Meeting, Raleigh, NC, 2000

Poster Abstract Presentations at Professional Meetings, Conferences, etc. (<u>only first/last author</u>)

1. *-Murante R, Matonti L, **Nielsen K**, and Magwene PM. 2026 Is bigger better? QTL analysis of C. neoformans titan cell formation and virulence. FASEB Chromosome Biology and Cell States in Yeasts Meeting, Niagra Falls, NY
2. *Martinez K, *Lin MC, and **Nielsen K**. 2026 Titan cell production increases in vivo diversity and can enhance antifungal drug resistance. FASEB Chromosome Biology and Cell States in Yeasts Meeting, Niagra Falls, NY
3. *Borges B, *Chenoweth, P, and **Nielsen K**. 2026. Exploring the role of CD4+ T-cells in hypervirulence of the clinical isolate UgCl422 of *Cryptococcus neoformans*. 12th International Conference of Cryptococcus and Cryptococcosis, Exeter, UK ***Selected for oral presentation***
4. *Kabbale KD, Kono T, Mboowa G, Falumo S, Boulware D, Dai B, Meya DB, and **Nielsen K.** 2026. *Cryptococcus neoformans* sequence type 93 is associated with reduced type-1 immune responses in Ugandan patients with HIV-associated cryptococcal meningitis. 12th International Conference of Cryptococcus and Cryptococcosis, Exeter, UK ***Selected for flash talk***
5. *Berg-Murante R and **Nielsen K**. 2026. Titan cells are essential for *C. neoformans* latency. 12th International Conference of Cryptococcus and Cryptococcosis, Exeter, UK ***Selected for oral presentation***
6. *Martinez K, *Lin MC, and **Nielsen K**. 2026 Titan cell production increases in vivo diversity and can enhance antifungal drug resistance. 12th International Conference of Cryptococcus and Cryptococcosis, Exeter, UK ***Selected for flash talk***
7. *Atim P, Khalil MO, Meya DB, *Hall E, Kanamwanji B, Najjuka G, Winfred AD, Kabazzi J, Akukunda A, and **Nielsen K**. 2025. ColonyPy: A python-based image analysis pipeline to quantify tolerance and heteroresistance in *Cryptococcus neoformans*. Fungal Cell and Molecular Biology Gordon Research Seminar and Conference, Holderness, NH ***Selected for oral presentation***
8. *Atim P and **Nielsen K**. 2025. ColonyPy: A python-based image analysis pipeline to quantify tolerance and heteroresistance in Cryptococcus neoformans. 35th Fungal Genetics Conference, Pacific Grove, CA ***Selected for oral presentation***
9. *Borges B, *Chenoweth, P, and **Nielsen K**. 2025. Exploring the role of CD4+ T-cells in hypervirulence of the clinical isolate UgCl422 of *Cryptococcus neoformans*. Keystone Symposium on Fungal Pathogens, Breckenridge, CO
10. *Betancourt J and **Nielsen K**. 2023. Granulomatous response during latent Cryptococcus infections. FASEB Microbial Pathogenesis Conference: Mechanisms of Infectious Diseases, Nice, France.

Jovany Betancourt, graduate student in the Nielsen lab received: Best Poster Award

11. *Ding M and **Nielsen K**. 2023. Characterization of CD4 T-cell dysfunction and control of latent *C. neoformans* infection. Immunology of Fungal Infections Gordon Research Conference, Galveston, TX. ***Selected for oral presentation*.**
12. *Okafor E, **Nielsen K**, and Boulware D. 2023. Cytotoxic Cells in the CNS of Subjects with Cryptococcal Meningitis and Advanced HIV. Immunology of Fungal Infections Gordon Research Conference, Galveston, TX. ***Selected for oral presentation*.**
13. *Jackson K and **Nielsen K**. 2023. Unraveling the genetic determinants of virulence in *Cryptococcus neoformans*. 11th International Conference on Cryptococcus and Cryptococcosis, Kampala, Uganda. ***Selected for oral presentation*.**
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15. *Okafor E, **Nielsen K**, and Boulware D. 2023. Cytotoxic Cells in the CNS of Subjects with Cryptococcal Meningitis and Advanced HIV. 11th International Conference on Cryptococcus and Cryptococcosis, Kampala, Uganda. ***Selected for oral presentation***.
16. *Betancourt J and **Nielsen K.** 2023. Assessing the C3HeB/FeJ mouse phenotype in conferring resistance against latent *Cryptococcus neoformans* infection. 11th International Conference on Cryptococcus and Cryptococcosis, Kampala, Uganda.
17. Yoder M and Nielsen K. 2023. *In vivo* treatment with fluconazole alters drug heteroresistance in a titan-cell dependent manner. 11th International Conference on Cryptococcus and Cryptococcosis, Kampala, Uganda
18. *Kabbale Kisakye D, Meya D, and **Nielsen K**. Establishing the landscape of structural variations in *Cryptococcus neoformans* isolates from Ugandan cryptococcal meningitis patients using long read sequencing. 11th International Conference on Cryptococcus and Cryptococcosis, Kampala, Uganda. ***Selected for oral presentation***.
19. *Atim P, Meya D, and **Nielsen K**. 2023. Lack of association between fluconazole susceptibility and ERG11 nucleotide polymorphisms in *Cryptococcus neoformans* clinical isolates from Uganda. 11th International Conference on Cryptococcus and Cryptococcosis, Kampala, Uganda.
20. *Kassaza K, **Nielsen K**, and Bazira J. 2023. Development of diagnostic PCR to differentiate clinically relevant SNPs. 11th International Conference on Cryptococcus and Cryptococcosis, Kampala, Uganda.
21. *Wasswa F, **Nielsen K**, and Bazira J. 2023. Minion Whole Genome Sequencing of Blood for Diagnosis of Meningitis in Mbarara, Uganda. 11th International Conference on Cryptococcus and Cryptococcosis, Kampala, Uganda.

22. *Jackson K, and **Nielsen K**. 2022. Linkage analysis of clinical isolates in the *Cryptococcus neoformans* ST93 clade reveals two non-recombining populations with different in vivo disease manifestations. Gordon Research Seminar and Conference, Holderness, New Hampshire.
23. *Ding M, and **Nielsen K**. 2022. A murine model of latent pulmonary cryptococcosis. Aspen Lung Conference, Aspen, Colorado
24. *Ding M, and **Nielsen K**. 2022. Defining the criteria for establishing a murine model of latent *Cryptococcus neoformans* infection using clinical isolates. FASEB Microbial Pathogenesis Conference: Mechanisms of Infectious Diseases, Nice, France. ***Selected for oral presentation.***
25. *Okafor E, Boulware DR, and Nielsen K. 2022. The role of NK cells in human cryptococcosis. FASEB Microbial Pathogenesis Conference: Mechanisms of Infectious Diseases, Nice, France.
26. *Jackson K, and Nielsen K. 2022. Linkage analysis of clinical isolates in the *Cryptococcus neoformans* ST93 clade reveals two non-recombining populations with different in vivo disease manifestations. Fungal Genetics Conference, Asilomar, California.
27. *Jackson K, and **Nielsen K.** 2020. Linkage disequilibrium analysis reveals two non-recombining populations in *C. neoformans* sequence type 93. Global Health Poster Showcase, Global Health Day 2020, Minneapolis, Minnesota
28. *Jackson K, *Gerstein A, Wang Y, *Mukaremera L, Xue C, Boulware D, and **Nielsen K**. 2019. Single nucleotide polymorphisms are associated with strain specific virulence changes in *Cryptococcus neoformans.* 30th Fungal Genetic Conference, Asilomar, California
29. *Ding M, *Smith K, *Wiesner D, and **Nielsen K.** 2019. Characterization of the latent infection model in *Cryptococcus neoformans.* Gordon Research Conference on Mechanisms on Immunology of Fungal Infections, Galveston Texas, 2019
30. *Mukaremera L, Lee KK, Gow N, Boulware DR, and **Nielsen K**. 2018. Titan cell production reshapes *Cryptococcus neoformans* cell surface composition in order to modulate and/or evade the host immune system. 20th International Congress of the Society for Human and Animal Mycology, Amsterdam, Netherlands. ***Selected for oral presentation.***
31. *Mukaremera L, Lee KK, Gow N and **Nielsen K**. 2017. Titan cell production in *Cryptococcus neoformans* reshapes the cell wall and capsule composition during infection. 2nd Cell Wall Meeting, Ensenada, Mexico. ***Selected for oral presentation.***
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34. *Mukaremera L, Lee KK, Gow N, and **Nielsen K**. 2016. *Cryptococcus neoformans* titan cells fool the host immune system. 2nd EMBO Conference on AIDS-Related Mycoses, Cape Town, South Africa. ***Selected for oral presentation.***

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40. *Wiesner DW, and **Nielsen K.** 2014. Specialized Regulatory T Cells Suppress Pathologic Type-2 Helper T Cell Inflammation during Pulmonary Cryptococcosis. 9th International Congress on *Cryptococcus* and Cryptococcosis, Amsterdam, Netherlands. ***Selected for oral presentation.***

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47. Achan B, Boulware DR, Meya DB, and **Nielsen K**. 2013. High prevalence of fluconazole resistance in *Cryptococcus neoformans* isolates from HIV-infected patients in Kampala, Uganda: A worrying trend. EMBO Conference on AIDS Associated Mycoses, Cape Town, South Africa. ***Selected for oral presentation.***
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51. *Okagaki-Vraspir LH, *Crabtree JN, and **Nielsen K.** 2012. Titan cell production in *Cryptococcus neoformans* alters host-pathogen interactions. 112th General Meeting of the American Society for Microbiology, San Francisco, CA.
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54. *Crabtree JN, *Okagaki-Vraspir LH, and **Nielsen K.** 2012. Cryptococcal titan cell formation affects interactions with the host and subsequent pathogenesis. Keystone Symposium on Fungal Pathogens: From Basic Biology to Drug Discovery, Santa Fe, NM.
55. *Okagaki-Vraspir LH, Wang Y, Ballou ER, O'Meara TR, Alspaugh JA, Xue C, and **Nielsen K.** 2012. Cryptococcal titan cell formation is regulated by G-protein signaling in response to multiple stimuli. Keystone Symposium on Fungal Pathogens: From Basic Biology to Drug Discovery, Santa Fe, NM.
    Laura Okagaki, graduate student in Nielsen laboratory received: Eukaryotic Cell Young Investigator Poster Award

56. *Strain AK, *Goettge M, Corcoran J, Meya D., Kajumbula H, Knight JF, and **Nielsen K.** 2012. Tracking a fungal pathogen in Uganda – Identifying environmental sources of human cryptococcal infections. 112th General Meeting of the American Society for Microbiology, San Francisco, CA.

57. *Crabtree J, Nelson R, Jenkins M, and **Nielsen K.** 2011. Development of a novel mouse model to study latency and reactivation of *C. neoformans* infection. Immunology of Fungal Infections Gordon Research Conference, Galveston, TX.

58. *Okagaki-Vraspir LH, *Crabtree J, and **Nielsen K.** 2011. Interaction between cryptococcal titan cells and the innate immune system affects pathogenesis. Immunology of Fungal Infections Gordon Research Conference, Galveston, TX.

59. *Moskalenko A, *Wiesner D, Meya D, Kajumbula H, Boulware D and **Nielsen K.** 2011. Genotype is associated with phenotypic characteristics, clinical presentation, and immunological response. 8th International Conference on *Cryptococcus* and Cryptococcosis, Charleston, SC.

60. *Strain A, Corcoran J, Kajumbula H, Meya D, Knight J, and **Nielsen K**. 2011. Environmental reservoirs for *Cryptococcus* in Uganda. 8th International Conference on *Cryptococcus* and Cryptococcosis, Charleston, SC.

61. *Okagaki-Vraspir L, Wang Y, Ballou E, O'Meara T, Alspaugh A, Xue C, and **Nielsen K.** 2011. Cryptococcal titan cell formation is regulated by G-protein signaling. 8th International Conference on *Cryptococcus* and Cryptococcosis, Charleston, SC.

62. *Moskalenko A and **Nielsen K**. 2011. Comparison of strain genotype, phenotype and patient clinical reaction to the opportunistic fungal pathogen *Cryptococcus neoformans.* 26th Fungal Genetics Conference, Pacific Grove, CA.

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    Laura Okagaki, graduate student in Nielsen laboratory received:
    Genetics Society of America Poster Award
    Eukaryotic Cell Young Investigator Poster Award

65. *Okagaki-Vraspir LH, *Strain AK, and **Nielsen K.** 2009. Cryptococcal cell morphology affects host cell interactions and pathogenicity. American Society for Cell Biology Conference, San Diego, CA.
    Cell Biology Novel and Newsworthy Top Pick (one of ten abstracts highlighted by the American Society of Cell Biology at their annual meeting)

66. *Strain AK and **Nielsen K.** 2008. Determining virulence of *Cryptococcus neoformans* mating type **a** and α strains using quantitative PCR. 15th Annual Midwest Microbial Pathogenesis Conference, Madison, WI.

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70. **Nielsen K** and Heitman J. 2003. Establishment of the sexual cycle of *Cryptococcus neoformans* variety *grubii* and virulence of congenic **a** and α isolates. 22nd Fungal Genetics Conference, Pacific Grove, CA.
71. **Nielsen K** and Heitman J. 2003. Analysis of the sexual cycle of *Cryptococcus neoformans* variety *grubii*. EuroConference on Host-Pathogen Interactions: Human Fungal Pathogens, La Colle sur Loup, France. ***Selected for oral presentation.***
72. **Nielsen K** and Heitman J. 2003. Mating in Serotype A – Virulence of congenic **a** and α isolates. 3rd International *Cryptococcus neoformans* Genome Conference, Vancouver, BC, Canada.
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76. **Nielsen K,** Boston RS, and Payne GA. 1999. Maize ribosome-inactivating protein 1 has antifungal activity against *Aspergillus flavus* and *Aspergillus nidulans.* 20th Fungal Genetics Conference, Pacific Grove, CA.
77. **Nielsen K,** Payne GA, and Boston RS. 1998. Maize ribosome-inactivating protein 1 disrupts normal growth patterns of *Aspergillus flavus.* 40th Annual Maize Genetics Conference, Lake Geneva, WI.

Popular Press, Publicity, etc.

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3. 2025 WJHL News 11, https://www.wjhl.com/business/press-releases/ein-presswire/775616776/vipc-awards-funding-to-virginia-tech-for-recruitment-of-world-class-expert-in-fungal-diseases/
4. 2025 VT News, https://news.vt.edu/articles/2025/01/vetmed-research-study.html
5. 2024, News-medical.net, https://www.news-medical.net/news/20241216/Study-aims-to-predict-and-improve-treatment-for-Cryptococcus-infections.aspx
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TEACHING AND CURRICULUM DEVELOPMENT

Virginia Tech

R01 Grant Writing Workshop Coordinator **2024 – Present**
Molecular Biology of the Cell Independent Study (BMVS 5974) **2026**

Curriculum Development

R01 Grant Writing Workshop (Unlisted)

The goal of this 12-week writing workshop is for participants to generate a robust draft of an R01Grant for submission to one of the National Institutes of Health. The workshop is designed in a "writing group" format where participants share preliminary drafts of grant sections for peer review by the instructors and other participants. Many of the participants are Assistant Professors. Thus, the course focuses on providing guidance on the thought processes and structure behind grant design, and utilizes a workbook developed by the Grant Writers' Seminars and Workshops as a framework. Every grant is different, and the instructors work with each individual in the course to identify the skills and techniques that resonate with them and fit best for their given grant topic. Thus, the recommendations presented in the workbook are used as one example, with further discussion of other options during the workshop discussions. The structure of the workshop involves 5 in-person meetings that are 1.5 hours in duration, with the instructors available as needed for individualized consultations. The course was designed by Dr. Nielsen, and co-taught by Drs. Nielsen and Martha Ann Bell, Eleanor Nelson, and Janet Webster.

Molecular Biology of the Cell Independent Study (BMVS 5974)

A graduate-level interdisciplinary course taught through the Biomedical and Veterinary Science (BMVS) curriculum in the College of Veterinary Medicine. The course focuses on a detailed knowledge of cell biological processes at the molecular level. The course utilized the Molecular Biology of the Cell textbook and covered 16 chapters. PhD students enrolled in the course presented a lecture on at least one chapter related to their area of research and completed 16 quizzes to pass the course.

University of Minnesota

Course/Lecture List

K-Series Grant Writing Course (Unlisted) **2021 – Present**
Microbial Genetics Advanced Laboratory (MICB 4225) **2009 – Present**

Curriculum Development

K-Series Grant Writing Course (Unlisted)

The goal of this 12-week writing course is for postdoctoral scholars to generate a robust draft of a K99, K22, or K01 Career Development Grant (or equivalent) for submission to one of the National Institutes of Health. The workshop is designed in a "writing group" format where participants share preliminary drafts of grant sections for peer review by the instructors and other participants. Many of the participants are international and have

not written an NIH-style grant previously, or the grant writing process was not emphasized in their previous training. Thus, the course focuses on providing guidance on the thought processes and structure behind grant design, and utilizes a workbook developed by the Grant Writers' Seminars and Workshops as a framework. Every grant is different, and the instructors work with each individual in the course to identify the skills and techniques that resonate with them and fit best for their given grant topic. Thus, the recommendations presented in the workbook are used as one example, with further discussion of other options during the class discussions. The structure of the course involves biweekly meetings that are 1.5 hours in duration, with the instructors available on the alternate weeks for individualized consultations. The course was designed by Dr. Nielsen, and co-taught by Drs. Nielsen and David Greenstein.

Microbial Genetics Advanced Laboratory (MICB 4225)

A senior-level College of Biological Science (Microbiology, Genetics Cell Biology and Development, Biochemistry, and Neurobiology majors) undergraduate course designed by Dr. Nielsen in 2009. Course focuses on eukaryotic genetics using the model organism *Saccharomyces cerevisiae*. Topics taught include reverse and forward genetics, fluorescence microscopy of organelles, transformation, homologous recombination, mutagenesis, and sequencing. Course was designated as writing intensive in 2012. In 2015, the course was redesigned to focus on hypothesis-driven forward genetics and co-taught with Dr. Ryan Hunter. *In 2020, due to the COVID-19 pandemic and the need to teach virtually we completely refocused the course, incorporating all new content, and used a primary literature-based review to teach molecular techniques in microbial genetics, still using 6-hours per week instruction but Dr. Anna Selmecki co-taught the course.* In 2021, Drs. Nielsen and Selmecki redesigned the course to add additional content focused on the use of whole genome sequencing in forward genetic studies in 2021.

Collaborative Efforts and Activities

Advanced Mycology for Fungal Biologists (EEB 8990), 2 lectures	2017
Integrated Topics in Microbiology, Immunology, and Cancer Biology (MICA 8012) 1 lecture	2011
Molecular and Genetic Basis for Microbial Disease (MICB 4151), 1 lecture	2009, 2010, 2023
Microbiology and Immunology for Medical Students (MICB 6205), 3 lectures	2008 – 2009
Eukaryotic Microbiology (MICB 4161), 1 lecture	2008
Teaching in Higher Education (GRAD 8101), 1 lecture	2008

<u>Duke University</u>

Collaborative Efforts and Activities

Body and Disease (INTERDIS 102), laboratory section teaching assist.	2006 - 2007

North Carolina State University

Collaborative Efforts and Activities

Cell Biology (BIO 414), teaching assistant 2000
Plant Physiology Laboratory (BIO 422), laboratory section teaching assist. 1999

ADVISING AND MENTORING

Undergraduate Student Activities

Undergraduate research projects (UROPs, directed research, student lab experience, etc.)

Sarah Howlett, 2026 – present, FURF
Paige Chenowith, 2025 - present
Ian Heung, 2025 – present
Sia Ravva, 2025 – present
Udeme Gordon, 2025 – present, FURF
Olivia Knight, 2023 – 2024
Han Rhee, 2023 – present, LSSURP
Madeline Harris-Gordon, 2023 – 2024
Jacquelyn Beaudrie, 2020 – 2023; summer research experience in Uganda 2022; *currently a medical student at LMUD*
Zayid Dakane, 2021 LSSURP 2021; *graduated from Bemidji State University in 2023*
Grace Ha, 2019 – 2021, UROP 2020; *currently an Accounts Receivable Coordinator at Pace Analytical*
Vy Tran, 2019 – 2021, LSSURP 2019, directed research 2020; *completed Dental School at UCSF and currently works at Stadium Dental Group*
Duc Tran, 2018; *currently an Incoming Perioperative Nurse at Hennepin Healthcare*
Christopher Molenaar, 2017 – 2019, directed research 2018-19, UROP 2018, HHMI, BS 2019; *currently a K-12 science teacher for special needs students, Roseville High School*
Aimee Gervais, 2017 – 2018, BS 2018; *currently a Chemist at Aerotek*
Katherine Chen, 2016; *explored broad research interests, then attended law school and is currently a scientific patent layer at Carlson Caspers*
Nate Payne, 2014 – 2016, directed research 2016, UROP 2016, BS 2017; *received an MPH at University of Minnesota*
Josh Kerkeart, 2013 – 2016, UROP 2014, BS 2016; *received is PhD from Dartmouth College and currently a post-doc in Lori Huberman's lab at Cornell*
Ben Lueck, 2013 – 2016, directed research 2015, UROP 2015, BS 2016; *currently a Medical Student at Duke University Medical Center and is currently a physician at Mayo Clinic*
Haley Cobb, 2014 – 2015, directed research 2015, UROP 2015, BS 2015; *currently a Science and Government Policy advisor for Winthrop and Weinstine*
Lindsay Nevalainen, 2012 – 2014, UROP 2014, directed research 2013-2014, BS 2014; *received her PhD from Indiana University, currently an administrative associate in the University of Minnesota Office of Biotechnology Activities Oversight*

Alycia Legeros, 2012 - 2014, BS 2014
Kyle Smith, 2009 - 2015, UROP 2012, directed research 2012, BS 2012; *currently a Researcher 5 in the Department of Pediatrics, UMN*
Michelle Goettge, 2010 - 2012, UROP 2011, directed research 2011-2012, BS 2012; *received a PhD in Microbiology from Univ. Illinois, Champagne-Urbana and is currently Director of Microbiology and Fieldstone Bio*
Jennifer Blalock, 2010 – 2012, BS 2014, *currently a medical writer at the Sarah Cannon Research Institute*
Elliot Gerlach, 2009 – 2010, BS 2010; *received his MS from Georgetown, currently an Upstream Process Development Scienctist at Ferring Pharmaceutical*
Laura McCarville, 2008 – 2009, UROP 2008, BS 2009
Michael Nyland, 2009 – 2010, UROP 2009, directed research 2009-2010
Kayla Patek, 2007 – 2008, BS 2009; *received a MS in genetic counseling from U. Cincinnati in 2012 and currently works with the Maternal Fetal Medicine Physician Group at Virginia Hospital Center in Arlington, VA*

Undergraduate summa theses or honors projects directed
Ben Lueck, 2016; *currently a Medical Student at Duke University Medical Center*
Michelle Goettge, 2012; *received a PhD in Microbiology from Univ. Illinois, Champagne-Urbana in 2018, and is currently a Senior Scientist Stealth Stage Biotech*

Graduate Student Activities

Doctoral Dissertations Directed
Katrina M. Jackson, *Unravelling the genetics determinants of disease in Cryptococcus neoformans*, 2017 – 2023, Microbiology, Immunology, and Cancer Biology (MICaB)
Currently Postdoctoral Fellow in the laboratory of Bridget Barker at Northern Arizona University focused on Coccidiomycosis.
Darin L. Wiesner, *The regulation and consequences of Type-2 helper T cells during pulmonary cryptococcal infection*, 2012 – 2015, Microbiology, Immunology, and Cancer Biology (MICaB)
Currently an Assistant Professor, Department of Medicine, Rutger's Medical School
Laura H. Okagaki-Vraspir, *The production and function of titan cells in Cryptococcus neoformans*, 2007 - 2012, Microbiology, Immunology, and Cancer Biology (MICaB)
Currently a Product Development Program Manager at Medtronic, which is the corporate equivalent to a principal investigator

Doctoral Students Advised (Academic advising for all or part of student's program)
Kimberly Martinez, 2024 – present, Infectious Diseases Interdisciplinary Graduate Education Program (ID IGEP) and Biomedical and Veterinary Sciences (BMVS)
Priscilla Atim, 2024 – present, BMVS
Priscilla Atim, 2022 – Present, Makerere University (co-advised by David Meya)
Diana Kisakye, 2021 – Present, Makerere University (co-advised by David Meya)

Kennedy Kassaza, 2020 – Present, Mbarara University of Science and Technology (co-advised by Joel Bazira)
Jovany Betancourt, 2022 – 2025, MD/PhD, MICaB
NIH F31AI181528 "*Understanding granuloma formation during latent cryptococcosis*"
NIH T32GM008244 Training Grant
Elizabeth Okafor, 2019 – 2024, MD/PhD Program (co-advised by DR. Boulware)
NIH F31AI162230 "*NK cell cytotoxicity against Cryptococcus neoformans in persons with advanced HIV and cryptococcal meningitis*"
NIH T32GM008244 Training Grant
Minna Ding, 2019 – 2023, MD/PhD Program
NIH F30AI155292 "*The adaptive host response to latent cryptococcosis*"
Dinnekin Fellowship
NIH T32GM008244 Training Grant
Katrina Jackson, 2017 – 2023, MICaB Graduate Program
NIH F31AI148047 "*Single nucleotide variations account for strain specific virulence changes in Cryptococcus neoformans*"
Doctoral Dissertation Fellowship
Darin Weisner, 2011 – 2015, MICaB Graduate Program
NIH T32 T32AI007313 Training Grant
Watson Fellowship
Doctoral Dissertation Fellowship
Juliet Crabtree, 2010-2012, PhD from Peterson laboratory in 2016
Laura Okagaki-Vraspir, 2007 – 2012, MICaB Graduate Program
Watson Fellowship
Doctoral Dissertation Fellowship

Doctoral Committees Served on
Rebekah Woodyard, 2024 – present, DBS
Abigail Gress, 2021 – 2024, MICaB
Alexander Villarreal, MICaB, Chair, 2017 – 2023
Kelsey Binder, MICaB, 2016 – 2018
Elizabeth Adamowicz, MICaB, 2015 – 2019
Rebecca Pulver, Molec., Cellular, Dev. Biol. & Genetics (MCDB&G), 2008 – 2013
Darren Abbey, MCBD&G, 2010 – 2014

Service on Preliminary Exam Committees
Mary Piaskowski, MICaB, 2023
Abigail Gress, MICaB, 2020
Alexander Villarreal, MICaB, 2017, Chair
Kelsey Binder, MICaB, 2016
Elizabeth Adamowicz, MICaB, 2015
Kristin Paukin, MICaB, 2010
Jon Linehan, MICaB, 2009
Johanna Reed, MICaB, 2009
Geoff Hart, MICaB, 2008

Masters Students Advised (Academic advising for all or part of graduate student's program)

Patricia Atim, 2019 – 2022, Makerere University, Master of Microbiology (Co-advised by David Meya), *Identification of ERG11 polymorphisms associated with fluconazole resistance in CrAg+ asymptomatic patients with cryptococcal meningitis*

Sophia Fulton, 2018 – 2020, UMN, Master of Biological Sciences (Plan B - Research Project), *Repurposing benzimidazole compounds as antifungal drugs to treat Cryptococcus neoformans*

Sangeetha Ulagaoozhian, 2009 - 2010, Univ. Marie & Pierre Currie (UMPC), Paris, France, *Analysis of gene expression in Cryptococcus strains with differential titan cell formation*

Post-doctoral and Medical fellows supervised

Dr. Bruno Borges, 2025 – Present

Dr. Rachel Berg-Murantes, 2024 – present

Dr. Perry Kezh, 2023 – 2025 *Currently a research scientist at the Roxbury Institute*

Dr. Bart Theelan, 2023 – 2024 *Currently a senior researcher in the Department of Pediatrics, Medical School, UMN*

Dr. Sophie Altramirano, 2018 – 2021
K12GM119955 TREM IRADCA Postdoctoral Fellowship, 2018 – 2021
Currently an Imaging Specialist at Molecular Devices

Dr. Caleb Skipper, 2018 – 2021
T32AI055433 ID Fellowship 2018-2019, 2021
D43TW009343 Fogarty Fellowship 2020
Currently an Assistant Professor in the Department of Medicine, Division of Infectious Diseases, University of Minnesota Medical School

Dr. Liliane Mukaremera, 2014 – 2019
D43TW009345 Fogarty Fellowship 2016
Currently a Senior Lecturer (Associate Professor equivalent),Department of Microbiology, University of Exeter, United Kingdom

Dr. Aleeza Gerstein, 2015 – 2018
Banting Postdoctoral Fellow, Canadian Institutes of Health Research, 2015 – 2018
Currently an Associate Professor, Departments of Microbiology and Statistics, University of Manitoba, Winnipeg, Canada (her hometown and thus target position)

Dr. Zhongming Li, 2013 – 2016
Currently a Research Specialist, Nathans Laboratory, Department of Molecular Biology and Genetics, Johns Hopkins University, Baltimore, Maryland

Dr. Tami McDonald, 2012 – 2014
Currently an Associate Professor with tenure at St. Catherine University, Minneapolis, Minnesota (her hometown and wanted to teach in a small college)

Dr. Emma Robertson, 2012 – 2013
Currently a Project Manager at Science Skills Academy at Highlands and Islands Enterprise, Inverness, United Kingdom – a STEM program connecting scientists with learners (her hometown and target position).

Dr. Man Shun Fu, 2012 – 2013
Currently a Research Supervisor, Institute of Immunology & Immunotherapy, Institute of Microbiology & Infection, University of Birmingham, Birmingham, United Kingdom
Dr. Oleksandr Moskalenko, 2009 – 2012
Currently the Research Computing Applications and Facilitation Manager, Research Computing Center, University of Florida, Gainesville, Florida
Dr. Anna Strain, 2008 – 2012
Currently the Manager, Infectious Diseases Laboratory, Minnesota Department of Health

Visiting Scholars Hosted

Diana Kisakye, Bioinformaticist, Makerere University, Kampala, Uganda, 2023
Kennedy Kassaza, PhD student, Mbarara University, Mbarara, Uganda, 2019, 2022
Dr. Frederick Kechia, Sabbatical, Associate Professor, Medical Mycology, Department of Biomedical Science, Faculty of Health Science, University of Bamenda, Cameroon, 2019
Dr. Joel Bazira, Senior Lecturer, Mbarara University, Uganda, 2017, 2019, 2024
Dr. Kabanda Tazeera, Lecturer, Mbarara University, Mbarara, Uganda, 2016
Beatrice Achan, Infectious Diseases Fellow, Makerere University, Kampala, Uganda, 2011
Sangeetha Ulagaoozhian, Master Student, Univ. Marie & Pierre Currie (UMPC), Paris, France, 2009-2010
Ruth Franco-Alméstica, LLSURP Student, Univ. Puerto Rico, 2010

Medical Students

Alli McClure, 2026 – present, VTCSOM 4-year mentored research project focused on antifungal drug development
Carly Lin, 2025 – present, VTCSOM 4-year mentored research project focused on factors influencing endemic mycosis prevalence in Virginia
Issa Mutyaba, 2023, T35AI118620 Medical Student Summer Fellow
Mentored on a research project to define how the innate immune response changes over time in *Cryptococcus* granulomas
Amera Hassan, 2021, T35AI118620 Medical Student Summer Fellow
Mentored on a research project to determine how different clinical isolates of *Cryptococcus* impact cytokine expression and killing by human NK cells in vitro
Pavithra Ramakrishnan, 2019, T35AI118620 Medical Student Summer Fellow
Mentoring on a research project to determine how macrophage polarization due to titan cell formation impacts dissemination of *Cryptococcus* from the lungs
Katelyn Pastick, 2018 T35AI118620 Medical Student Summer Fellow
Mentoring and research guidance on human immunology cryptococcosis studies with Drs. David Boulware and Marc Jenkins
Kristina Krohn, 2009, Medical Student, Global Infectious Diseases Program, Univ. of Minnesota
Mentoring related to cryptococcosis studies in Kampala, Uganda
Ann Vogt, 2009, Medical Student, Global Infectious Diseases Program, University of Minnesota

Individual Career Development Mentorship (Formal)

Xiaogang Wang, Assistant Professor, Dept Biomedical Sciences and Pathobiology 2024 – present, Virginia Tech, Chair of Mentoring Committee

Anna Selmecki, Assistant Professor, Dept Microbiology & Immunology, University of Minnesota, Chair of Mentoring Committee

Subree Subramanian, Professor, Dept Surgery, University of Minnesota, 2021
Mentoring related to promotion to full professor

Danny Li, Assoc. Prof, Dept Pathology and Laboratory Medicine, Univ. Minnesota, 2020
Mentoring related to running a research laboratory, recruiting students, and hiring lab staff

Beth Thielen, Asst Prof, Dept Pediatrics, University of Minnesota, 2020 – 2021
Mentoring related to establishing a translational research program

Elizabeth Ballou, Lecturer, University of Birmingham, UK, 2019
Mentoring related to career development.

Teresa O'Meara, Postdoctoral Fellow, University of Toronto, Canada, 2017 – 2019
Mentoring related to dual career job searches and negotiations in academia. Dr. O'Meara is currently an Asst Prof in the Dept of Microbiol & Immunol at Univ. of Michigan

Lynsey Fettig, 2011- 2013, MICB 4225 student in 2010
Mentoring related to career development, work/life balance, and graduate school applications while a technician in Yee laboratory, currently PhD candidate at University of Colorado

Sarah Michaelsen, 2010-2012, MICB 4225 student in 2009
Mentoring related to career development, received PhD from University of Minnesota, MICaB program in 2017

PROFESSIONAL SERVICE AND PUBLIC OUTREACH

Service to the Discipline/Profession/Interdisciplinary Area(s)

Editorships/Journal Reviewer Experience

Reviews Editor, Frontiers in Cellular and Infection Microbiology, 2022 – present
Academic Editor, *Microbiology Spectrum*, 2021 – present
Academic Editor, *MBio*, 2016 – 2025
Academic Editor, *PLoS ONE*, 2007 – 2022
Ad Hoc Academic Editor, *PLoS Pathogens*, 2014, 2015, 2016, 2018, 2021, 2022, 2024, 2025, 2026
Ad Hoc Academic Editor, *mBio*, 2012
Editorial Board, *Journal of Fungi*, 2020 - present
Editorial Board, *Infection and Immunity*, 2015 - 2025
Editorial Board, *Eukaryotic Cell*, 2012 – 2015
Ad Hoc Manuscript Reviewer in the past 5 years for various journals such as: *Antimicrobial Agents and Chemotherapy, **Cell**, Cell Cycle, Cell Host & Microbe, Cellular Microbiology, Current Genetics, EMBO, Frontiers in Immunology, Fungal*

Genetics and Biology, G3, Genetics, Genome Biology, Immunology, Infection and Immunity, Journal of Immunology, Journal of Leukocyte Biology, mBio, Molecular Microbiology, mSphere, Mycologia, ***Nature****, Nature Communications, Nature Reviews Microbiology, PLoS Biology, PLoS Genetics, PLoS Pathogens, PLoS Neglected Tropical Diseases,* ***Science****, Science Reports, Traffic, Virulence*

Review panels for external funding agencies, foundations, university tenure review, etc.

Standing Member, Pathogenic Eukaryotes (PTHE), National Institutes of Health, 2014 – 2020
Grant Review Panel Member, R24 panel, National Institutes of Health, 2024
Grant Review Panel Member, Fogarty Research Training for LMICs, National Institutes of Health, 2024
Grant Review Panel Member, Pathogenic Eukaryotes (PTHE), National Institutes of Health, 2011 – 2013, 2023, 2025
Grant Review Panel Member, Infectious Diseases and Immunology Fellowships, National Institutes of Health, 2013, 2022, 2023
Special Emphasis Panel Member, Centers of Biomedical Research Excellence [COBRE] Program, National Institutes of Health, 2020 – 2021
Grant Review, Wellcome Trust, 2021
Grant Peer Review, Biotechnology and Biological Sciences Research Council (BBSRC), United Kingdom, 2012, 2015, 2017, 2021
Grant Review Panel Member, Infectious Disease Fellowships, 2021-2022
Grant Review Panel Member, Special Emphasis Panel for Standing Members, NIH, 2024
Grant Review Panel Ad hoc Member, HIV Research Training Programs for Low- and Middle-Income Country Institutions , 2024
Grant Review Panel Ad hoc Member, Pathogenic Eukaryotes, NIH, 2025
Grant Review, AAPG (French Government), 2025
Grant Review Panel Ad hoc Member, Clinical Neuroimmunology and Brain Tumors, NIH, 2026
Grant Review Panel Member, Special Emphasis Panel Coccidiomycosis Collaborative Research Centers, 2026
Distinguished Professor Dossier Review, Duke, 2026
Tenure Promotion Dossier Review, Brown, 2025
Tenure Promotion Dossier Review, University of Michigan, 2024
Promotion Dossier Review, University of Sydney, Australia, 2023
Promotion Dossier Review, University of North Carolina, 2023
Tenure Promotion Dossier Review, University of Oklahoma, 2022
Tenure Promotion Dossier Review, University of Utah, 2020, 2022
Tenure Promotion Dossier Review, Northern Arizona University, 2019
Promotion Dossier Review, Duke University Medical School, 2019
Tenure Promotion Dossier Review, Rutgers New Jersey Medical School, 2016
Group Leader Review, Pasteur Institute, France, 2019
Assistant Professor Review, Genomics Research Center, Academica Sinica, Taiwan, 2019
International PhD Thesis Review, University of Cape Town, South Africa, 2023
International PhD Thesis Review, University of Queensland, Australia, 2020

International PhD Thesis Review, University of Sydney, Australia, 2019
International PhD Thesis Review, University of Kwazulu-Natal, South Africa, 2018

Organization of conferences, workshops, panels, symposia

Discussion Leader, "Morphologies", 12th International Conference on Cryptococcus and Cryptococcosis, 2026
Facilitator, Career Development, 12th International Conference on Cryptococcus and Cryptococcosis, 2026
Genetics Society of America, Mentor and Inclusion Ambassador, 35th Fungal Genetics Conference, 2026
Discussion Leader, "Neurological Immune Responses", Immunology of Fungal Infections Gordon Research Conference, Los Angeles, CA, 2025
Panel Member, Power Hour, Immunology of Fungal Infections Gordon Research Conference, Los Angeles, CA, 2025
Panel Member, Career Development session, Immunology of Fungal Infections Gordon Research Seminary, Los Angeles, CA, 2025
Co-Organizer, 11th International Conference on *Cryptococcus* and Cryptococcosis, Kampala, Uganda, 2020 – *postponed to January 2023 due to Covid-19*
Plenary Session Chair, "Fungal development and signaling", 30th Fungal Genetics Conference, 2019
Panel Member and Discussion Leader, Power Hour, Immunology of Fungal Infections Gordon Research Conference, Galveston, Texas, 2019
Discussion Leader, "The Microbiology of Fungi: What Immunologists Need to Know", Immunology of Fungal Infections Gordon Research Conference, 2019
Discussion Leader, "Mechanistic Diversity Underlying Human Pathogenesis", Cellular and Molecular Fungal Biology Gordon Research Conference, 2018
Co-Organizer, Power Hour, Immunology of Fungal Infections Gordon Research Conference, Galveston, Texas, 2017
Discussion Leader: "Immunogenetics and Pathophysiology of Fungal Immunity", Immunology of Fungal Infections Gordon Research Conference, Galveston, Texas, 2017
Faculty mentor, Immunology of Fungal Infections Gordon Research Seminar, Galveston, Texas, 2017
Organizer, Short Course on *Cryptococcus* and Cryptococcosis, Oxford University Clinical Research Unit, Ho Chi Min City, Vietnam, 2016
Co-Organizer, 2nd EMBO Conference on AIDS-Related Mycoses, Cape Town, South Africa, 2016
Session Organizer and Co-Chair: "Host-Pathogen Interactions", 9th International Conference on *Cryptococcus* and Cryptococcosis, Amsterdam, Netherlands, 2014
Session Organizer and Co-Chair: "New Insights into Fungal Pathogenesis", 112th General Meeting of the American Society for Microbiology, San Francisco, CA, 2012
Session Organizer and Chair: "Infectious Diseases Research in East Africa", Addressing Global Challenges through International Research Conference, University of Minnesota, Minneapolis, MN, 2012
Session Co-Chair: "Physiopathology", 8th International Conference on *Cryptococcus* and Cryptococcosis, Charleston, SC, 2011

National Committee memberships

Academy Election Review Committee, Amer. Soc. Microbiol	2022 – 2026
DeLill Nasser Award Committee, Genetics Society of America	2014 – 2017

Service to the University/Medical School/Department

Virginia Tech

University-wide service

Center for Zoonotic, Anthropogenic, and Emerging Pathogens (CeZAP) Advisory Committee	2026 – present
Joint VCU/VT Genomic Resources Committee	2026 – present
Frontier Award Review Committee	2026
Pew Internal Grant Review Panel	2026
Panel Member, National Funding Session, Professional Development Inst.	2026
CeZAP Symposium Planning Committee	2025
VCOM One Health Grant Review Panel	2025
R01 Grant Writing Program Facilitator, Off of Research and Innovation	2024 – Present

Department/Unit Service

Director of Graduate Programs, Biomedical Science Track	2026 - Present
Chair, Graduate Advisory Committee	2025 – Present
BMVS Retreat Planning Committee	2025
Chair, Faculty Mentoring Committee for Xiaogang Wang	2024 – Present

University of Minnesota

University-wide service

Co-Principal Investigator and Director, K12GM119955 Minnesota IRADCA Training Grant	2020 – Present
Steering Committee, K12GM119955 IRADCA Training Grant (previously Training Research Educators in Minnesota - TREM)	2018 – 2022
Steering Committee, CGHSR Scholars Program Center for Global Health and Social Responsibility	2018 – Present
Campus Writing Board	2017 – 2022
Co-Director, Univ. Minnesota Mycology Graduate Group (UMycoNET)	2015 – 2019
University Flow Cytometry Resource (UFCR) Advisory Board	2011 – 2021

Medical School Service and Intercollegiate Service

Pandemic Rapid Response Issues for the Medical School Environment (PRRIME) Committee	2020 – Present
Basic Science Compensation Committee ***Disbanded due to Covid-19***	2019 – 2020
Salary Equity Review Committee (SERC)	2019 – Present
Center for Women in Medicine and Science (CWIMS)	2018 – Present

Salary, Resource and Leadership Equity Action Group, 2018 – 2020
Dean's Faculty Advisory Committee 2017 – 2021
Chair, FAC sub-committee on tenure, 2018 – 2019
Mentor, Ugandan Research Collaborative Program 2017 – Present
National Research Mentoring Network 2014 – Present
Professional Development Core, Mock Study Section
Clinical and Translational Science Institute Scientific Review Committee 2012 – 2014
Infectious Diseases (ID) Corridor Steering Committee 2011 – 2014
Faculty search committee, microbial pathogenesis position 2008 – 2009
Department of Diagnostic and Biological Sciences, School of Dentistry
Microbiology, Immunology, and Cancer Biology Graduate Program (MICaB)
Committee on Graduate Affairs 2014 – 2019
Travel Award committee 2012 – 2019
Student Seminar Faculty Review 2007 – Present

Department/Unit Service

Chair, M&I Salary Compensation Plan Committee 2021
Chair, Faculty Mentoring Committee for Anna Selmecki 2019 – 2021
Master Mentor 2019
Chair, Faculty Search Committee, fungal pathogenesis position 2018 – 2019
Microbiology Research Facility (MRF) Equipment Purchase Committee 2015
MRF Design Team 2012 – 2015
Organizer, Special Workshop 2015
Histopathology for Dummies: Basics for a Molecular Biologist
Faculty Search Committee, two bacteriologist positions 2010 – 2014
Chair, Microbiology BSL2 Flow Cytometry Advisory Committee 2009 – 2011

Duke University

Coordinator, Duke Univ. Mycology Research Unit Postdoctoral Assoc. 2003 – 2004

North Carolina State University

Graduate Student Representative, NCSU Botany Dept. Steering Committee 2001
Executive Committee Member (Parliamentarian), NCSU Graduate Student Assoc. 2000
Vice-President, NCSU Botany Graduate Student Association 1999
Founder/Coordinator, NSF/DOE/USDA Interdepartmental Journal Club 1998 – 2002
Grad Student Rep., NSF/DOE/USDA Training Grant Steering Committee 1996 –1999