66th ANNUAL COCCIDIOIDOMYCOSIS STUDY GROUP MEETING

SCIENTIFIC MEETING AGENDA
Presentations of Original Research Regarding Coccidioidomycosis
April 8-9, 2022
Buck Owens Crystal Palace
Bakersfield, CA

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Friday, April 8, 2022

12:00-1:00 REGISTRATION

1:00-1:15 WELCOME AND INTRODUCTIONS
Neil Ampel (President, CSG), Arash Heidari (Host, VFI)

Epidemiology Section - Moderated by Neil Ampel

1:15-1:30 URGENT CARE PRACTICE PATTERNS FOR DIAGNOSING COCCIDIOIDOMYCOSIS IN A HIGHLY ENDEMIC URBAN POPULATION
Jie Pu1, Valerie Miranda1, Devin Minior1, Shane Reynolds1, Benjamin Rayhorn1, John Galgiani2,3
1Banner Health System, Phoenix, USA. 2University of Arizona College of Medicine-Tucson, Tucson, USA

1:30-1:45 HEALTH DISPARITIES IN COCCIDIOIDOMYCOSIS INCIDENCE — CALIFORNIA, 2000–2019
Marisa Donnelly1,2, Gail Sondermeyer Cooksey1, Alyssa Nguyen1, Adam Readhead1, Alexander Yu1, Duc Vugia1, Seema Jain1
1California Department of Public Health, Richmond, CA, USA. 2Centers for Disease Control and Prevention, Epidemic Intelligence Service, Atlanta, USA

1:45-2:00 ASSESSMENT OF SPATIOTEMPORAL DISTRIBUTION OF COCCIIDOIDES WITHIN AMBIENT AIR IN PHOENIX, AZ
Parker Montfort1, W. Tanner Porter1, Daniel Lord1, Lalitha Gade2, Anastasia Litvintseva2, Jolene Bowers1, David Engelthaler1
1Pathogen and Microbiome Division, Translational Genomics Research Institute (TGen North), Flagstaff, USA. 2Mycotics Disease Branch, Centers for Disease Control and Prevention, Atlanta, USA

2:00-2:15 COCCIDIOIDOMYCOSIS IN THE VETERANS HEALTH ADMINISTRATION (VHA), 2010-2021
Cynthia Lucero-Obusan1, Patricia Schirmer1, Gina Oda1, Mark Holodniy1,2
1U.S. Department of Veterans Affairs, Public Health Program Office, Palo Alto, USA. 2Stanford University Division of Infectious Diseases & Geographic Medicine, Stanford, USA
2:15-2:45 POSTER VISITATION SESSION 1

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**Epidemiology & Occupational Health Section - Moderated by Neil Ampel**

2:45-3:00 INFLUENCE OF METEOROLOGICAL FACTORS AND DROUGHT ON COCCIDIOIDOMYCOSIS INCIDENCE IN CALIFORNIA, 2000–2020
Jennifer Head¹, Gail Sondermeyer-Cooksey³, Alexandra Heaney¹, Alexander Yu², Isabel Jones¹, Abinash Bhattachan³, Simon Campo¹, Robert Wagner¹, Whitney Mgbara¹, Sophie Phillips¹, Nicole Keeney¹, John Taylor¹, Ellen Eisen¹, Dennis Lettenmaier⁴, Alan Hubbard¹, Gregory Okin¹, Duc Vugia³, Seema Jain², Justin Remais¹

¹UC Berkeley, Berkeley, USA. ²California Department of Public Health, Richmond, USA. ³California State University - East Bay, Hayward, USA. ⁴UC Los Angeles, Los Angeles, USA

3:00-3:15 INTEGRATING PUBLIC HEALTH SURVEILLANCE AND ENVIRONMENTAL DATA TO MODEL THE PRESENCE OF COCCIDIOIDOMYCOSIS
Kimberly Kaufeld¹, Morgan Gorris¹, Andrew Greene², David Kline³, Staci Hepler²

¹Los Alamos National Laboratory, Los Alamos, USA. ²Wake Forest University, Winston-Salem, USA. ³Wake Forest School of Medicine, Winston-Salem, USA

3:15-3:30 WORK-RELATED COCCIDIOIDOMYCOSIS IN CALIFORNIA: EXAMINING THE BURDEN OF DISEASE USING WORKERS’ COMPENSATION AND ARCHIVAL DATA
Savannah Hunter - UC Davis Sociology, Davis, USA

3:30-3:45 COCCIDIOIDOMYCOSIS CLUSTER AMONG WILDLAND FIREFIGHTERS, CALIFORNIA 2021
Dorothy Maffei¹,², Marisa Donnelly¹,³, Gail Sondermeyer Cooksey¹, Barbara Materna¹

¹California Department of Public Health, Richmond, USA. ²Council of State and Territorial Epidemiologists, Atlanta, USA. ³Centers for Disease Control and Prevention, Atlanta, USA

3:45-4:00 UPDATE FROM THE CENTERS FOR DISEASE CONTROL AND PREVENTION
Tom Chiller - Mycotic Diseases Branch
SATURDAY, APRIL 9, 2020

7:00-8:00 CONTINENTAL BREAKFAST/REGISTRATION

7:45-8:00 WELCOME AND INTRODUCTIONS
Neil Ampel (President, CSG), Arash Heidari (Host, VFI)

Basic Science Section – Moderated by Bridget Barker

8:00-8:15 INTERACTIONS BETWEEN VALLEY FEVER AND GENETIC ANCESTRY: DOES GENETIC ANCESTRY AFFECT RISK OF DEVELOPING DISSEMINATED COCCIDIOIDOMYCOSIS?
Sarah J. Spendlove1,2, Samantha L. Jensen3, Diego Orellana2,4, Alexis V. Stephens5, George R. Thompson6,7,8, Royce H. Johnson9,10, Arash Heidari9,10, Manish J. Butte3,5, Valerie A. Arboleda1,2,3,11
1Interdepartmental Bioinformatics Program, David Geffen School of Medicine, UCLA, Los Angeles, CA, USA. 2Department of Pathology and Laboratory Medicine, David Geffen School of Medicine, UCLA, Los Angeles, CA, USA. 3Department of Human Genetics, David Geffen School of Medicine, UCLA, Los Angeles, CA, USA. 4UC Santa Barbara, Santa Barbara, CA, USA. 5Division of Immunology, Allergy, and Rheumatology, Department of Pediatrics, David Geffen School of Medicine, UCLA, Los Angeles, CA, USA. 6UC Davis Center for Valley Fever, UC Davis, Davis, CA, USA. 7Department of Medical Microbiology and Immunology, UC Davis, Davis, CA, USA. 8Department of Medicine and Division of Infectious Diseases, UC Davis, Davis, CA, USA. 9Department of Medicine, David Geffen School of Medicine, UCLA, Los Angeles, CA, USA. 10Valley Fever Institute, Kern Medical, Bakersfield, CA, USA. 11Department of Computational Medicine, David Geffen School of Medicine, UCLA, Los Angeles, CA, USA

8:15-8:30 ELUCIDATING THE INTERACTIONS BETWEEN MACROPHAGES AND COCCIDIOIDES
Jane Symington, Allison Cohen, Mark Voorhies, Anita Sil
UCSF, San Francisco, USA

8:30-8:45 PROTECTIVE HOST RESPONSES AGAINST COCCIDIOIDES
Susana Tejeda-Garibay, Anh Diep, Nadia Miranda, Katrina Hoyer
University of California Merced, Merced, USA

8:45-9:00 PREDICTION AND DISCOVERY OF COCCIDIOIDES-SPECIFIC T CELL EPITOPES
Nhung Nguyen1, Althea Campuzano1, Matthew Barker1, Heidi Erickson2, Josh Malo3, Neil Ampel3, Jane Homan3, Chiung-Yu Hung1
1South Texas Center for Emerging Infectious Diseases. Department of Molecular Microbiology and Immunology, San Antonio, USA. 2University of Arizona, Tuscon, USA. 3igenetics, Madison, USA
9:00-9:15 FINDING LOVE IN DESPERATE CONDITIONS: SEX AS A RESPONSE TO NUTRIENT LIMITATION IN COCCIDIOIDES POSADASII
Klaire Laux1, Marcus Teixeira2,3, Bridget Barker4
1Northern Arizona University, Flagstaff, USA. 2University of Brasilia, Asa Norte, Brazil

9:15-9:30 REACTIVATION OF COCCIDIOIDAL DISEASE PROGRESSION IN ASYMPTOMATIC, STABLY INFECTED MICE
Lisa Shubitz1, Daniel Powell1,2, Christine Butkiewicz1, Hilary Moale1, Hien Trinh1, Jeffrey Frelinger1, John Galgiani1
1Valley Fever Center for Excellence, University of Arizona, Tucson, USA. 2Department of Immunobiology, University of Arizona, Tucson, USA

9:30-9:45 ESTABLISHMENT OF A GALLERIA MELLONELLA MODEL FOR THE STUDY OF VIRULENCE AND ANTIFUNGAL DRUG SUSCEPTIBILITY OF COCCIDIOIDES
Matthew Barker, Althea Campuzano, Sarah Saeger, Jieh-Juen Yu, Chiung-Yu Hung
UTSA Department of Molecular Microbiology and Immunology, South Texas Center for Emerging Infectious Diseases, San Antonio, USA

9:45-10:00 STRUCTURAL AND FUNCTIONAL STUDIES OF COCCIDIOIDES CPS1
University of Arizona, Tucson, USA

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10:00-10:30 POSTER VISITATION SESSION 2

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Ecology Section – Moderated by Bridget Barker

10:30-10:45 EXPLORING CYCLES OF COCCIDIOIDOMYCOSIS USING PATTERNS OF RELATIVE INCIDENCE IN ENDEMIC COUNTIES IN THE UNITED STATES
Malavika Rajeev, Samantha Williams, Mohammed Khan, Mitsuru Toda, Ana Litvintseva, Nancy Chow
Centers for Disease Control and Prevention, Atlanta, USA

10:45-11:00 COCCIDIOIDES DETECTED IN RODENT BURROW SOILS, BUT UNDETECTED IN AGRICULTURAL SOILS OR SETTLED DUST, IN THE SAN JOAQUIN VALLEY IN CALIFORNIA
Robert Wagner1, Liliam Montoya1, Cheng Gao2, Justin Remais1, John Taylor1
1University of California Berkeley, Berkeley, USA. 2Chinese Academy of Sciences, Beijing, China
11:00-11:15  MODELING THE DISCHARGE OF INFECTIOUS ARTHROCONIDIA OF THE FUNGAL PATHOGEN COCCIDIOIDES POSADASII GROWING IN SOIL
Daniel Kollath, Bridget Barker
The Pathogen and Microbiome Institute at Northern Arizona University, Flagstaff, USA

11:15-11:30  DETECTION OF COCCIDIOIDES SPP. ON THE CHANNEL ISLANDS, CALIFORNIA
Julian Jordan, Antje Lauer
CSUB, Bakersfield, USA

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11:30-1:00  LUNCH BREAK
Business Meeting – Moderated by Neil Ampel, President

UPDATE FROM THE NATIONAL INSTITUTES OF HEALTH
Dona Love - NIAID

UPDATE FROM THE FOOD AND DRUG ADMINISTRATION
Hiwot Hiruy – CDER

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Clinical Sciences Section – Moderated by Janis Blair

1:00-1:15  IMMUNOGENETICS ASSOCIATED WITH SEVERE COCCIDIOIDOMYCOsis
Amy Hsu1,2, Agnieszka Korzeniowska1, Cynthia Aguilar1, Jingwen Gu1, Eric Karlins1, Andrew Oler1, Gang Chen1, Glennys Reynoso1, Joie Davis1, Alexandria Chaput1, Tao Peng1, Ling Sun1, Justin Lack1, Derek Bays2, Ethan Stewart3, Sarah Waldman3, Daniel Powell4, Fariba Donovan4, Jigar Desai1, Nima Pouladi5, Debra Long Priel6, Daisuke Yamanaka1, Sergio Rosenzweig7, Julie Niemela7, Jennifer Stoddard7, Alexandra Freeman1, Christa Zerbe1, Douglas Kuhns6, Yves Lussier4, Kenneth Olivier8, Richard Boucher5, Heather Hickman1, Jeffrey Frelinger4, Joshua Fierer9, Lisa Shubitz4, Thomas Leto1, George Thompson III5, John Galgiani5, Michail Lionakis1, Steven Holland8
1NIAID/NIH, Bethesda, USA. 2University of Maryland, College Park, USA. 3University of North Carolina, Chapel Hill, USA. 4University of Arizona, Tucson, USA. 5University of California Davis, Davis, USA. 6Leidos Biomedical Research, Inc., Frederick National Laboratory for Cancer Research, Frederick, USA. 7Department of Laboratory Medicine, CC, NIH, Bethesda, USA. 8NHLBI/NIH, Bethesda, USA. 9University of California San Diego, La Jolla, USA
1:15-1:30  CONTRIBUTION OF BIOLOGIC RESPONSE MODIFIERS TO THE RISK OF COCCIDIOIDOMYCOSIS SEVERITY  
Fariba Donovan1,2, Ferris Ramadan3, James Lim4, Julia Buchfuhrer2, Rebia Khan4, Natalie DeQuillfeldt, Natalie Davis2, Ashwini Kaveti2, Melanie De Shadarevian5, Edward Bedrick1, John Galgiani1,2  
1Valley Fever Center for Excellence, University of Arizona, Tucson, AZ, USA. 2Department of Medicine, University of Arizona, Tucson, AZ, USA. 3Department of Epidemiology and Biostatistics, University of Arizona, Tucson, AZ, USA. 4Department of Medicine, University of Arizona, Phoenix, AZ, USA. 5A. T. Still University, School of Osteopathic Medicine, Mesa, AZ, USA

1:30-1:45  COCCIDIOIDOMYCOSIS SCORE SYSTEM: MSG 2.0  
Royce Johnson1,2,3, Rupam Sharma1,2, Valerie Civelli1, Vishal Narang1, Rasha Kuran1,2,4, Carlos D’Assumpcao1,2,3, Arash Heidari1,2,3  
1Kern Medical, Bakersfield, USA. 2Valley Fever Institute, Kern Medical, Bakersfield, USA. 3David Geffen School of Medicine, UCLA, Los Angeles, USA. 4David Geffen School of Medicine, UCLA, Bakersfield, USA

1:45-2:00  IMPACT OF VALLEY FEVER ON QUALITY OF LIFE  
Kathy T. Nguyen1, Alexis V. Stephens2, Dana Brucker3, Royce H. Johnson3, Manish J. Butte2, Morna J. Dorsey1  
1University of California, San Francisco, San Francisco, USA. 2University of California, Los Angeles, Los Angeles, USA. 3Kern Medical, Bakersfield, USA

2:00-2:15  COCCIDIOIDOMYCOSIS OF THE SPINAL CORD & ANALYSIS OF 19 CASES AND REVIEW OF THE LITERATURE  
Rasha Kuran1,2, Manan Thacker1,2, Rupam Sharma1,2, Arman Froush1, Royce Johnson1,2, Arash Heidari1,2  
1Kern Medical, Bakersfield, USA. 2Valley Fever Institute, Bakersfield, USA

2:15-2:45  POSTER VISITATION SESSION 3

2:45-3:00  RISK FACTORS FOR FLUCONAZOLE FAILURE IN THE TREATMENT OF COCCIDIOIDAL MENINGITIS  
Simran Gupta, Neil M. Ampel, Marie F. Grill, Molly Klanderman, Janis E. Blair  
Mayo Clinic, Phoenix, USA

3:00-3:15  SERUM PROCALCITONIN LEVEL IN PULMONARY COCCIDIOIDOMYCOSIS INFECTION  
Shatha Aboaid1, Rupam Sharma2, Arash Heidari1,2,3, Ayham Aboeed1,4  
1Department of Medicine, Kern Medical Center, Bakersfield, USA. 2Valley Fever Institute, Kern Medical Center, Bakersfield, USA. 3Division Of Infectious Disease, Kern Medical Center, Bakersfield, USA. 4Division Of Pulmonary and Critical Care, Kern Medical Center, Bakersfield, USA
3:15-3:30 QUANTITATIVE BIOMARKERS TO DETERMINE RISK OF DISSEMINATED COCCIDIOIDOMYCOSIS
Sergio Barberan-Soler¹, Christian Ortiz¹, Deanna Fedash¹, Bianca Torres²,³, Evan Lanuza²,³, Royce Johnson²,³,⁴
¹RealSeq Biosciences, Santa Cruz, USA. ²Department of Medicine, Division of Infectious Diseases, Kern Medical, Bakersfield, USA. ³Valley Fever Institute, Bakersfield, USA. ⁴Department of Medicine, David Geffen School of Medicine UCLA, Los Angeles, USA

3:30-3:45 AN OUTBREAK OF COCCIDIOIDOMYCOSIS AMONG GEOLOGY STUDENTS
Julia Wang¹, Rupam Sharma²,³, Arash Heidari²,³,⁴, Royce Johnson²,³,⁴
¹Cal Tech, Pasadena, USA. ²Kern Medical, Bakersfield, USA. ³Valley Fever Institute, Kern Medical, Bakersfield, USA. ⁴David Geffen School of Medicine, UCLA, Los Angeles, USA

3:45 Concluding Remarks  Neil Ampel
6:00 CSG Banquet (pre-paid)  Padre Hotel
1. DIFFERENCES IN VALLEY FEVER RISK PERCEPTION AMONG RESIDENTS OF KERN COUNTY, CALIFORNIA, A HIGHLY ENDEMIC AREA OF COCCIDIOIDOMYCOSIS IMMUNOSUPPRESSION
Antje Lauer CSUB, Bakersfield, USA

2. DESCRIPTION OF THE INCREASE IN REPORTED COCCIDIOIDOMYCOSIS CASES FROM 2016-2021, MARICOPA COUNTY
Jennifer Collins Maricopa County Department of Public Health, Phoenix, USA

3. COCCIDIOIDOMYCOSIS CASES AND SARS-COV-2 TESTING, 2020–2021, MARICOPA COUNTY, ARIZONA
Christopher N. Tran, Brandon J. Howard, Nicole M. Jarrett, Rebecca H. Sunenshine, Jennifer E. Collins Maricopa County Department

4. A CASE OF COCCIDIOIDAL MENINGITIS WITH BIOFILM OBSTRUCTING VP SHUNT DUE TO CUTIBACTERIUM ACNES
Rupam Sharma1,2, Royce Johnson1,2,3, Gerard David4, Majid Rahimifar5, Arash Heidari1,2,3
1Kern Medical, Bakersfield, USA, 2Valley Fever Institute, Kern Medical, Bakersfield, USA, 3David Geffen School of Medicine, Los Angeles, USA, 4Kaiser Permanente, Bakersfield, USA, 5Memorial Hospital, Bakersfield, USA

5. A CASE OF CONCURRENT DISSEMINATED COCCIDIOIDOMYCOSIS AND EMBRYONAL CARCINOMA WHEN LICE AND FLEAS COEXIST
Michael Ke1,2, Arash Heidari1,2, Michael Valdez1,2, Allen Tsiy1, Rasha Kuran1,2, Royce Johnson1,2
1Kern Medical, Department of Medicine, Division of Infectious Diseases, Bakersfield, USA, 2Valley Fever Institute, Bakersfield, USA

6. A CASE OF COCCIDIOIDAL MENINGITIS WITH LOW-PRESSURE HYDROCEPHALUS
Michael Valdez1,2, Shikha Mishra1,2, Rasha Kuran1,2, Arash Heidari1,2
1Kern Medical, Department of Medicine, Division of Infectious Diseases, Bakersfield, USA, 2Valley Fever Institute, Bakersfield, USA

7. NEUROPARENCHYMA COCCIDIOIDOMAS COMPLICATED WITH PREGNANCY DURING THERAPY
Carlos D’Assumpcao1,2,3, Rupam Sharma1,2, Royce Johnson1,2,3, Rasha Kuran1,2,3
1Kern Medical, Bakersfield, USA, 2Valley Fever Institute, Kern Medical, Bakersfield, USA, 3David Geffen School of Medicine, UCLA, Los Angeles, USA

8. MILIARY COCCIDIOIDOMYCOSIS WITH HEPATIC AND CUTANEOUS DISSEMINATION
Jani Kim, Erik Jensen, Geetha Sivasubramanian
University of California San Francisco, Fresno Campus, Fresno, USA

9. THE NEUROSYPHILIS AND COCCI CONUNDRUM
Valerie Espinoza, Jeffrey Nguyen, Amar Shah, Kasey Radicic, Carlos D’Assumpcao, Rasha Kuran, Arash Heidari - Kern Medical, Bakersfield, USA
1. EXPLORING THE STATISTICAL LINKS BETWEEN COCCIDIOIDOMYCOSIS CASES AND WILDLAND FIRES
   Morgan E. Gorris¹, Kimberly A. Kaufeld¹, Staci A. Hepler², David M. Kline³
   ¹Los Alamos National Laboratory, Los Alamos, NM, USA. ²Wake Forest University, Winston-Salem, NC, USA.
   ³Wake Forest School of Medicine, Winston-Salem, NC, USA

2. RESISTANCE OF ENVIRONMENTAL FUNGI TO AZOLE DRUGS USED TO TREAT VALLEY FEVER
   Jocelyne Lopez, Antje Lauer - CSUB, Bakersfield, USA

3. BREAKING THE MOLD: APPLYING NEXT-GENERATION SEQUENCING TO THE URBAN AERO-MYCOBIOME IN PHOENIX, AZ IN SEARCH OF COCCIDIOIDES
   W. Tanner Porter, Parker Montfort, Bailey Flores, Jolene Bowers, Dave Engelthaler
   Translational Genomics Research Institute, Flagstaff, USA

4. CHARACTERIZATION OF SECONDARY METABOLITES RELEASED BY COMPETING SOIL MICROORGANISMS THAT ARE SHOWN TO INHIBIT THE GROWTH OF COCCIDIOIDES SPP.
   Matthew Morales, Daniel Kollath, Bridget Barker
   The Pathogen and Microbiome Institute, Northern Arizona University, Flagstaff, AZ, USA

5. INTESTINAL AND TRACHEAL MICROBIOMES INHIBIT IN VITRO GROWTH OF COCCIDIOIDES INMITTIS
   Susana Tejeda-Garibay, Anh Diep, Maria Pimentel, Katrina Hoyer
   University of California Merced, USA

6. IMAGING THE LUNG MICROENVIRONMENT DURING COCCIDIOIDOMYCOSIS
   Nadia Miranda, Anh Diep, Susana Tejeda-Garibay, Andres Roman, Katrina Hoyer
   UC Merced, Merced, USA

7. PROBIOTIC INHIBITION OF COCCIDIOIDES GROWTH
   Arianna Daniel1,2, Susana Tejeda-Garibay1,3, Katrina Hoyer1,3
   1Quantitative and Systems Biology Graduate Program, Merced, USA. 2-I-BioSTeP NIH Fellowship Program, Merced, USA.
   3Department of Molecular and Cell Biology, Merced, USA

8. THE CHARACTERIZATION OF NOVEL ONYGENALEAN FUNGI ISOLATED FROM PRAIRIE DOGS IN THE WESTERN UNITED STATES
   Kaitlyn Parra, Bridget Barker - Pathogen and Microbiome Institute, Northern Arizona University, Flagstaff, USA

9. INVESTIGATION OF KEY PROTEASES IN THE PARASITIC PHASE OF COCCIDIOIDES
   Christina Homer, Mark Voorhies, Anita Sil - UCSF, San Francisco, USA

10. AN OPTIMIZED ORGANIC GENOMIC DNA EXTRACTION FOR COCCIDIOIDES SPP.
    Mitchell Bryant - Pathogen and Microbiome Institute, Flagstaff, USA
11. PROGRESS TOWARDS A VALLEY FEVER BREATH TEST: IN VIVO BIOMARKERS FROM A MURINE MODEL
Emily A. Higgins Keppler1,2, Heather L. Mead3, Marley C. Van Dyke4, Douglas F. Lake1, D. Mitchell Magee5, Bridget M. Barker6, Heather D. Bean1,2
1School of Life Sciences, Arizona State University, Tempe, AZ, USA. 2Center for Fundamental and Applied Microbiomics, The Biodesign Institute, Tempe, AZ, USA. 3The Translational Genomics Research Institute (TGen), Phoenix and Flagstaff, AZ, USA. 4Microbiology Department, UT Southwestern, Dallas, TX, USA. 5Center for Personalized Diagnostics, Biodesign Institute, Arizona State University, Tempe, AZ, USA. 6The Pathogen and Microbiome Institute, Northern Arizona University, Flagstaff, AZ, USA

12. COCCIDIOIDOMYCOSIS EX VIVO CYTOKINE RELEASE ASSAY USING RECOMBINANT COCCIDIOIDES ANTIGENS.
Eric Holbrook1, Ian Robey2, Althea Campuzano3, Nhung Nguyen3, Cody Banks1, ChiungYu Hung3, Kenneth Knox2, Mrinalini Kala2, Joshua Malo2, Heidi Erickson2, Neil Ampe2, Joseph Wheat1
1MiraVista Diagnostics, Indianapolis, IN, USA. 2University of Arizona Health Sciences, Tucson, AZ, USA. 3University of Texas San Antonio, San Antonio, TX, USA

13. IDENTIFYING GENES INVOLVED IN THE TEMPERATURE DEPENDENT MORPHOLOGICAL TRANSITION IN COCCIDIOIDES POSADASII
Keith Walcott1, Bastian Joehnk1, Mark Voorhies1, Claire Dubiri2, Rachel Brem2, Anita Sil1
1University of California, San Francisco, San Francisco, USA. 2University of California, Berkeley, USA

14. HUMANIZATION OF ANTI-CTS-1 MURINE MONOCLONAL ANTIBODY INTO HUMAN IgG AND IgM REAGENTS.
Francisca Grill1, Thomas Gry2, Collin Jugler1, Qiang Chen1, Douglas Lake1
1Arizona State University, Phoenix, USA. 2Mayo Clinic Arizona, Phoenix, USA

POSTER SESSION 3

1. THROUGH SERUM POSACONAZOLE CONCENTRATIONS IN DOGS BEING TREATED FOR REFRACTORY COCCIDIOIDOMYCOSIS
Lisa Shubitz1,2, Sallianne Schlacks2, Christine Butkiewicz1, Polina Vishkautsan2, Kate Worthing2
1Valley Fever Center for Excellence, University of Arizona, Tucson, USA. 2Veterinary Specialty Center of Tucson, Tucson, USA. 3College of Veterinary Medicine, University of Arizona, Tucson, USA

2. CAREGIVER QUALITY OF LIFE IN PATIENTS WITH COCCIDIOIDOMYCOSIS
Hazem Aboaid1, Hazem Abaid2, Helen Meng1, Ji Il Jeon1, Rupam Sharma1, Rasha Kuran1,3,4, Royce H. Johnson1,3,4, Arash Heidari1,3,4
1Valley Fever Institute, Kern Medical Center, Bakersfield, USA. 2Touro University California College of Osteopathic Medicine, Vallejo, USA. 3Department of Medicine, Kern Medical Center, Bakersfield, USA. 4Division of Infectious Disease, Kern Medical Center, Bakersfield, USA

3. PEDIATRIC LARYNGEAL COCCIDIOIDOMYCOSIS: A CASE SERIES IN AN ENDEMIC REGION
Fouzia Naceem1, James McCarty2, Mark R Rowe3, Kelly Kathleen Hady3, Mary Anne Tablizo3, Vini Vijayan3
1Valley Children’s Healthcare, Madera, USA. 2Stanford University School of Medicine, Stanford, USA. 3Valley Childrens Healthcare, Madera, USA
4. A CASE SERIES OF COINCIDENT COCCIDIOIDOMYCOSIS AND MALIGNANCY
   Rupam Sharma\textsuperscript{1,2}, Jordan Slaton\textsuperscript{2}, Mehul Mistry\textsuperscript{2}, Navpreet Dhillon\textsuperscript{2}, Leila Moosavi\textsuperscript{1}, Arash Heidari\textsuperscript{1,2,3}, Royce Johnson\textsuperscript{1,2,3}, Rasha Kuran\textsuperscript{1,2,3}, Rahul Polineni\textsuperscript{1,2}, Everardo Cobos\textsuperscript{1,4}
   \textsuperscript{1}Kern Medical, Bakersfield, USA. \textsuperscript{2}Valley Fever Institute, Kern Medical, Bakersfield, USA. \textsuperscript{3}David Geffen School of Medicine, UCLA, Los Angeles, USA. \textsuperscript{4}David Geffen School of Medicine, UCLA, Bakersfield, USA

5. COCCIDIOIDOMYCOSIS AND THE FIVE RASHES
   Bianca Torres\textsuperscript{1,2}, Valerie F. Civelli\textsuperscript{1,3}, Carlos D'Assumpcao\textsuperscript{1,2}, Arash Heidari\textsuperscript{1,2}, Royce H. Johnson\textsuperscript{1,2}, Rasha Kuran\textsuperscript{1,2}
   \textsuperscript{1}Kern Medical, Bakersfield, USA. \textsuperscript{2}Valley Fever Institute, Bakersfield, USA. \textsuperscript{3}Clinica Sierra Vista, Bakersfield, USA

6. EFFECT OF TRANSITIONING AZOLE THERAPIES ON OUTCOMES OF COCCIDIOIDOMYCOSIS
   Rachael Jongsma, Jeff Jolliff, Arash Heidari, Royce Johnson, Rasha Kuran
   Kern Medical, Bakersfield, USA

7. THE UNEXPECTED INCREASE OF CD57+ CD8+ T CELLS IN DISSEMINATED COCCIDIOIDOMYCOSIS
   Alexis V Stephens\textsuperscript{1}, Terrie S Ahn\textsuperscript{1}, Timothy Thauland\textsuperscript{1}, Arash Heidari\textsuperscript{2}, Royce Johnson\textsuperscript{2}, Maria Garcia-Lloret\textsuperscript{1}, Manish Butte\textsuperscript{1}
   \textsuperscript{1}UCLA, Los Angeles, USA. \textsuperscript{2}Valley Fever Institute, Bakersfield, USA

8. ASSESSMENT OF T-HELPER CELL PHENOTYPES IN DISSEMINATED AND UNCOMPLICATED COCCIDIOIDOMYCOSIS
   Terrie S. Ahn\textsuperscript{1}, Timothy J. Thauland\textsuperscript{2}, Alexis V. Stephens\textsuperscript{1}, Dana Brucker\textsuperscript{3}, Arash Heidari\textsuperscript{3}, Royce H. Johnson\textsuperscript{3}, Maria I. García-Lloret\textsuperscript{1}, Manish J. Butte\textsuperscript{1,2}
   \textsuperscript{1}Division of Immunology, Allergy, and Rheumatology, Department of Pediatrics, University of California, Los Angeles, USA. \textsuperscript{2}Department of Microbiology, Immunology, and Molecular Genetics, University of California Los Angeles, Los Angeles, USA. \textsuperscript{3}Valley Fever Institute, Bakersfield, USA

9. PULMONARY GIANT CAVITARY COCCIDIOIDES WITH FUNGAL BALL AND HEMOPTYSIS
   Vishal Narang, Kevin Dao, Sara Jaratanian, Carlos D’assumpcao, Augustine Munoz, Arash Heidari
   Kern Medical-UCLA, Bakersfield, USA