



SPECIAL POINTS OF INTEREST:

- Current Residents—activities and accomplishments
- Updates NCVP alum
- NCVP Annual Spring Meeting
- NCVP Participation at AAVP 2021

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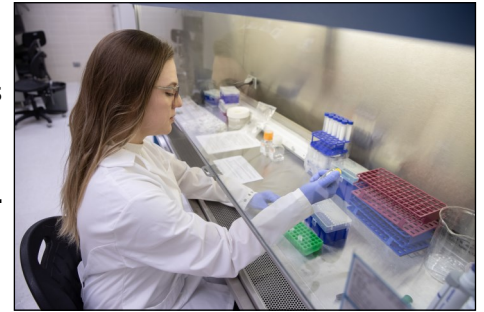
People



Raving about our Residents...Updates!

Dr. Caroline Sobotyk de Oliveira, Merck Resident at Texas A&M

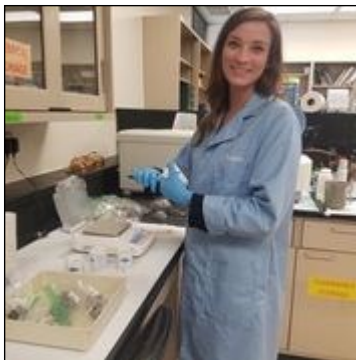
Caroline Sobotyk de Oliveira DVM, MSc, PhD has been making great strides towards completion of her residency. Caroline is the **Merck Resident in Veterinary Parasitology** working under the tutelage of **Dr. Gui Verocai (DACVM-Parasit.)** at Texas A&M University. Drs. Sobotyk and Verocai were one of the few research groups awarded an NCVP research grant in 2020 for their research entitled, "Characterizing circulating *Onchocerca lupi*-derived microRNA in naturally infected dogs and assessing their potential as diagnostic markers." In addition to her research, Caroline has been diligently strengthening her academic scholarship and credentials by participating in the



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11th Annual Sydney Phylogenetics Workshop and teaching Introduction to Parasitology in Companion Animals to Animal Science undergraduates at TAMU. **Congratulations to Drs. Sobotyk and Verocai** for their continuous efforts to be **academic all-stars!**

Dr. Kathryn Duncan, BI Resident at Oklahoma State University



Let's give **Kathryn Duncan, DVM, BI Resident at OSU**, a round of applause for some recent accomplishments. In October 2020, Dr. Duncan presented on her collaborative work with Elanco and IDEXX investigating the prevalence of **intestinal parasites in dogs attending dog parks** to veterinarians at a national CE conference (American Animal Hospital Association, Connexity). In November 2020, Kathryn **published a manuscript** on *Dermacentor albipictus* collected from dogs and cats (Duncan et al., 2020; see page 8 for full citation).

Also in November 2020, **Kathryn passed her written and oral qualifying examinations** conferring PhD candidacy!



**Boehringer
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Dr. Nicole Szafranski, the Zoetis Resident, collecting waterfowl samples as part of her parasite surveillance research.

(update on Kathryn Duncan continued...)

In February 2021, Dr. Duncan presented her dog park data to veterinarians at a regional CE conference. Kathryn joined the NCVP residency program in 2018, and is **on track to graduate in 2022**. In addition to research and CE at OSU, Kathryn is involved in teaching Parasitology I laboratories (socially distanced these days!) and lectures.

Keep on shining, Kathryn! The NCVP is so proud of you!

Dr. Nicole Szafranski, Zoetis Resident at University of Tennessee

Dr. Nicole Szafranski has been able to share her parasitology and veterinary skills with others to keep **field work** moving forward in spite of the challenges brought by the pandemic. Whether helping **wildlife biologists** anesthetize wood rats to collect samples for **Baylisascaris spp.** prevalence assays, retrieving **ticks and internal parasites from white-tailed deer** at processing facilities, or trapping **ducks** in flooded corn fields in western Tennessee for parasite surveillance, Nicole is acquiring first-hand experience with the joys and challenges of field parasitology while celebrating parasites in their natural state. **Thanks for bringing the parasites home for all to enjoy!**

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Dr. Timothy Wu, IDEXX Resident at Cornell University

Dr. Timi Wu is having a great time in the lab – both diagnostic and research – as he applies his **pathology expertise** to parasite systems. In addition to providing training to NCVP residents and fellow graduate students on parasite identification in histologic section (see page 5), Timi has been busy at the **New York State Animal Health Diagnostic Laboratory** with Dr. Mani Lejeune, identifying common and not-so-common veterinary parasites, including guinea pig **laelapid mites**, **strigeid trematodes** in a gull, and **oxyurids** in a porcupine. And he and Dr. Bowman are hatching (literally!) even more great plans with their research into optimal **Toxocara spp.** larvae recovery from eggs. **We are all excited to hear what's next!**

IDEXX

Dr. Katy Martin, Elanco Resident at Iowa State University

Katy Martin, DVM, MPH has been busy these days working with veterinary students at ISU to develop an **extension resource video series** for producers; the series covers fly control measures and important pig parasites, with plans to cover (article continued on the following page)



Dr. Timi Wu, the IDEXX Resident, examining a tissue culture flask in his lab at Cornell.

(Katy Martin article continued from page 2)

IOWA STATE UNIVERSITY
Department of Veterinary Pathology



Fly Control
Erica Moscoso, VM2, DVM Candidate
Dr. Katy Martin, DVM, MPH



Above: Dr. Katy Martin (pictured), Elanco Resident, together with a veterinary student at ISU, presented to producers on fly control.

topics on additional production animal species and anthelmintic resistance in future installments. Katy is also working with undergraduate students at the ISU horse barn to assess anthelmintic susceptibility of parasites within herds there. At ISU, **Katy conducts research in the laboratory of Dr. Matt Brewer.** Her research focus is ***Tritrichomonas foetus*** in the bovine host. Excitingly, their research laboratory received funding through a One Health mechanism to investigate trichomonads in an animal model! Dr. Martin was already pursuing a PhD at ISU when

she joined the NCVP Residency program in 2020. We are so happy to have you as a Resident, Katy, and keep up the awesome work!

Keep up the great work Caroline, Kathryn, Nicole, Timi, and Katy! The NCVP is so proud of your accomplishments as Residents!



Shout-outs to NCVP Alums!

Dr. Meriam Saleh in Post-Doctoral Position at Texas A&M

Congratulations to **Dr. Meriam Saleh** on the **post-doc** position at **Texas A&M University** beginning January 2021! The research opportunity affords her the distinct privilege of **working alongside veterinary parasitologists Dr. Gui Verocai and NCVP Resident (Merck) Dr. Caroline Sobotyk.** Meriam has a BS in Animal Science from the University of Tennessee and a PhD in Veterinary Parasitology from Virginia Tech, which she earned under the **mentorship of THE Dr. Anne Zajac.** After graduation, Meriam conducted post-doctoral research under the mentorship of Dr. Susan Little at Oklahoma State University. At OSU, Meriam's research was tick-focused, and together with Dr. Little and several graduate students, Dr. Saleh launched the national **"Show Us Your Ticks!"** survey. In addition to research at OSU, Meriam participated in teaching veterinary students and CE opportunities. She also served as the **NCVP project leader from 2019–2020.** Thank you Meriam for all of your hard work at OSU and for the NCVP!



Meriam Saleh, PhD, with team members at TAMU. From left to right: Matthew Kulpa, DVM (PhD student), Gui Verocai, DVM, MSc, PhD, DACVM-Parasit. (Clinical Assistant Professor), Meriam, and Caroline Sobotyk de Oliveira, DVM, MSc, PhD (Merck Resident).

We will miss you, but are so excited for this next chapter of your life!

Dr. Jessica Rodriguez, NCVP Resident Alum, Senior Principal Scientist at Zoetis!

Jessica Rodriguez, DVM, PhD, DACVM–Parasit. is now serving as a **Senior Principal Scientist of Global Therapeutics (Parasitology)** at **Zoetis!** AAVP member and friend of the NCVP Dr. Tom McTier retired from the position in 2020, and Dr. Rodriguez transitioned into the new role in January 2021. **Congratulations, Jessica!** Jessica earned her DVM from Texas A&M University in 2009. After a stint in practice, she returned to TAMU to earn a PhD through the **NCVP Residency training program** under the sponsorship of **Merial** and mentorship of Dr. Karen Snowden. Jessica's dissertational research focus was on ***Heterobilharzia americanum*** (infection detection, distribution, and prevalence). Jessica graduated with her PhD and passed the ACVM board exam in parasitology in 2017. She then was quickly hired on by Zoetis as a veterinary parasitologist in the veterinary specialist group, and worked in this capacity within the company until accepting the principal scientist position based in Kalamazoo, Michigan.



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Dr. Jeba Jesudoss Chelladurai, NCVP Resident Alum, Now Boarded in Immunology!



Accolades are in order for **Dr. Jeba Jesudoss Chelladurai** ("Dr. JC"), Assistant Professor of Parasitology at Kansas State University's College of Veterinary Medicine, as she recently was **boarded in immunology** through the ACVM. Jeba was certified in parasitology in 2018.

Jeba, originally from south India, graduated top of her class with a **BVSc from Madras Veterinary College** in Chennai. She then embarked to the United States to earn a **Master's in Microbiology** from North Dakota State University studying *Cryptosporidium* spp. in wild birds. Following, she was accepted into the **NCVP residency training program** under the direction of Matt Brewer, DVM, PhD, DACVM-Parasit., investigating resistance and susceptibility mechanisms of helminths important in veterinary medicine and molecularly characterizing the ABC-B gene family in *Toxocara canis*.

In her current position at KSU, Dr. JC works closely with other Veterinary Parasitology faculty to support diagnostics, research, and teaching.

Congrats Jeba, BVSc, MS, PhD, DACVM-Parasit., DACVM-Immunology...and NCVP RESIDENT ALUM!!!!



Events



Residents Hold Virtual Meetings with Tangible Results

Our **NCVP residents** have been busy pooling their shared strengths and individual areas of expertise with **virtual training opportunities** focused on growing diagnostic and clinical parasitology skills. Organized by **Dr. Meriam Saleh**, former NCVP Project Leader, these get-togethers allow the residents to target specific areas of growth to facilitate progress



Above: Drs. Meriam Saleh (TAMU), Timi Wu (CU, IDEXX Resident), Nicole Szafranski (UT, Zoetis Resident), Katy Martin (ISU, Elanco Resident), Caroline de Sobotyk de Oliveira (TAMU, Merck Resident), and Kathryn Duncan (OSU, BI Resident) sharing a few of their favorite parasites during a Zoom review session on identifying parasites in histologic sections led by Dr. Timi Wu.

on their residency journeys. Topics focus on a variety of resident-selected areas including basics of parasite identification in histologic section, clinical pathology changes associated with parasitism, and treatment and prevention strategies for parasites. **Interactive, discussion-focused presentations are followed by short quizzes** with residents asked to identify mystery parasite slides or suggest possible diagnoses or treatments. Animated conversations often ensue, and parasite-fun is had by all!

NCVP Spring Fling – or One More Time in the Zoom Room?



The **Spring 2021 Annual NCVP Meeting** of the Board occurred (**virtually**) on **March 24–25**. Who would have thought a year ago, when we convened for our Spring 2020 meeting by Zoom for the first time, here we'd be Zooming all over again? And yet our dedication to the advancement of parasitology has not wavered. In a few short-but-action packed hours over two days, we reviewed our outreach activities over the past year, delighted in tales from residents on their success with

clinical training in the midst of a pandemic, and finalized plans to support the upcoming AAVP meeting. We are hopeful that our next meeting in the Fall—with Residents in attendance for exciting updates—can be held in-person. **The advice, feedback, ideas, and insight provided by NCVP Board members are the reasons behind the Center's success. Thank you for your steadfast commitment to the NCVP during these particularly trying times!**



Events continued...

Parasitology is...Delicious?!?!

To celebrate the end of 2020 (!) and share a small **token of our appreciation** to supporters of NCVP near and far, the Center commissioned our first ever commemorative **NCVP cookie**. Designed and baked by 1 Smart Cookie, a locally-owned Oklahoma City bakery, these treats managed to achieve the impossible – making us appreciate parasites EVEN more, and at the end of a difficult year at that. We hope you were able to savor the sweetness!



Pictured right: NCVP sweet treat shared with friends of the Center as we said farewell (and good riddance!) to 2020 and began to look forward to 2021.

New Parasite Specimen Kits to Include *Cochliomyia* and *Rhipicephalus (Boophilus)*!!!

We are beyond pleased to announce that we have **sourced specimens of *Cochliomyia hominivorax*, primary screwworm, and *Rhipicephalus (Boophilus) microplus*, the southern cattle tick**. These highly coveted specimens were provided through the generosity of our colleagues and friends at the **USDA**.



Above: specimens of female and male southern cattle ticks (*Rhipicephalus microplus*) provided by USDA.

Like previous years, these specimens will be preserved in alcohol gel in a glass vial and **sent to all AVMA-accredited programs teaching veterinary parasitology** across North

America. Included in the **specimen kits for 2021** will be adults of *R. microplus* and third-stage larvae and adults of *C. hominivorax*. Both parasites have been eradicated from the United States and require constant surveillance to avoid re-introduction. As has been demonstrated numerous times in the past, veterinarians are often the first to recognize an incursion of these parasites and it is our sincere hope that these specimens will advance the training of future veterinarians to remain vigilant and aware.



Left: primary screwworm fly adult and larva, provided by USDA and included as part of the upcoming NCVP specimen set.

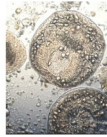
NCVP Participation at the 66th Annual AAVP Meeting

National Center for Veterinary Parasitology
invites you to attend the annual

Parasite Case Discussions

A case-based clinical parasitology experience combining parasite fun and audience participation (anonymously—it's clickers!)

Tuesday, June 22nd
14:35 – 16:35 pm



Join your parasitology colleagues for some entertaining and challenging clinical case quiz questions

Questions and answers presented by parasitology residents and include material on parasites of several different species

Bring your diagnostic expertise!



A Zoom link will be sent to all registered for the conference



National Center for Veterinary Parasitology
NCVP



Plans are well underway for the **AAVP annual conference (June 19–22, 2021)** in Lexington, Kentucky. The executive committee of AAVP is planning for a hybrid (in-person and virtual) meeting but recognize the reality that a 100% online meeting may be necessary as the COVID-19 pandemic persists and many AAVP members are restricted from traveling for business by their home institutions. Like last year, NCVP will not be discouraged and plans to host a **virtual table complete with awesome parasite swag and information**. AND we will continue our tradition of closing the AAVP conference by having NCVP residents present unique, challenging, and fun **Parasite Clinical Case Discussions**.

Stay tuned for more information on the NCVP virtual table and Clinical Case Discussions as the AAVP conference approaches.



AAVP

About the National Center for Veterinary Parasitology

Veterinary parasites impact human health and society in many ways. With the generous support of our sponsors, the National Center for Veterinary Parasitology works to promote greater understanding and control of parasitic diseases in animals through innovative partnerships between academia and industry. Housed in the College of Veterinary Medicine at Oklahoma State University, the Center strives to create future generations of veterinary parasitologists, conduct targeted research, and provide diagnostic and consulting services worldwide. To learn more, please visit ncvetp.org.



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So Many Parasites, So Little Time...Select Publications

Check out these amazing publications from [NCVP residents¹](#) and [grant recipients²](#) over the past year. (And for even MORE resident publications, check out the Fall 2020 newsletter.) What an incredible contribution everyone is making to the field. Well done! (Which is also the answer to the age-old riddle: "How does the parasitologist like her meat cooked?")

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- **Duncan KT¹**, Clow KM, Sundstrom KD, Saleh MN, Reichard MV, Little SE. Recent reports of winter tick, *Derma-centor albipictus*, from dogs and cats in North America. *Vet Parasitol Reg Stud Reports.* 2020;22:100490. doi: 10.1016/j.vprsr.2020.100490.
- Gruntmeir JM, Thompson NM, Long MT, Blagburn BL, **Walden HDS²**. Detection of heartworm antigen without cross-reactivity to helminths and protozoa following heat treatment of canine serum. *Parasit Vectors.* 2021;14(1):71. doi: 10.1186/s13071-020-04573-6.
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- McHale B, Callahan RT, **Paras KL¹**, Weber M, Kimbrell L, Velázquez-Jiménez Y, McManamon R, Howerth EW, Verocai GG. Sparganosis due to *Spirometra* sp. (Cestoda: Diphyllbothriidae) in captive meerkats (*Suricata suricatta*). *Int J Parasitol Parasites Wildl.* 2020;13:186-190. doi: 10.1016/j.ijppaw.2020.10.005.
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- Parkins ND, Stokes JV, Gavron NA, Frankovich AN, **Varela-Stokes AS²**. Scarcity of *Hepatozoon americanum* in Gulf Coast tick vectors and potential for cultivating the protozoan. *Vet Parasitol Reg Stud Reports.* 2020;21:100421. doi: 10.1016/j.vprsr.2020.100421.
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