



Deutsche Gesellschaft für Parasitologie



## 24<sup>th</sup> Drug Design & Development Seminar (DDDS) 2024 of the German Society for Parasitology (DGP)

**“Combining Efforts towards Human and Animal Parasitic Diseases”**

**Date:** March 13<sup>th</sup> – 15<sup>th</sup>, 2024  
Welcome Reception: March 12th, starting 5 pm

**Venue:** The Biocenter of the University of Würzburg,  
Germany

**Conference Homepage & Registration:**  
[24th Drug Design & Development Seminar \(DDDS\) 2024 · EVIS.events](https://www.evis.de/2024/ddds)

On the occasion of the 24<sup>th</sup> **DDDS** conference you are cordially invited to participate and to present your research in **an oral presentation (15 minutes) or as poster**. An abstract is requested for both talks and posters (**abstract guideline below**). The scientific board will select the topics for oral presentations or posters depending on the abstracts. Renowned international keynote speakers will provide a high-quality scientific framework. The seminar will be opened with a welcome reception on Tuesday evening and conclude Friday at noon.

**Extended deadline for registration December 15<sup>th</sup>, 2023**

**Extended deadline for abstract submission January 6<sup>th</sup>, 2024**

**Please register and submit your abstract here:**  
[24th Drug Design & Development Seminar \(DDDS\) 2024 · EVIS.events](https://www.evis.de/2024/ddds)

## **Keynote Speakers**

Roger Prichard      McGill University, Montreal, Canada  
Raffi V. Aronian      University of Massachusetts, Worcester, USA  
Natcha Gaillard & Ashwani Sharma      ASTRA Therapeutics, Villigen, Switzerland  
Stephen R. Doyle      Wellcome Sanger Institute, Hinxton, Cambridge, UK  
Mike Barrett      University of Glasgow, UK  
Petr Volf      Charles University, Prague, Czech Republic  
Jennifer Keiser      Swiss Tropical and Public Health Institute, Allschwil, Switzerland  
Simone Häberlein      Justus-Liebig-Universität Giessen, Germany

## **Scientific Board**

Prof. Dr. Klaus Brehm  
University of Würzburg, Germany

Prof. Dr. Markus Engstler  
University of Würzburg, Germany

Prof. Dr. Paul M. Selzer  
Boehringer Ingelheim Animal Health  
Ingelheim am Rhein, Germany

Dr. Sandra Noack  
Boehringer Ingelheim Animal Health  
Ingelheim am Rhein, Germany

## **Organizer:**

German Society for Parasitology & University of Würzburg

## **Venue**

The Biocenter of the University of Würzburg

Am Hubland

97074 Würzburg

## **About the Drug Design & Development Seminar (DDDS)**

The Drug Design & Development Seminar (DDDS) was founded in 1999 as an active working group of the German Society for Parasitology, by Prof. Dr. Peter Köhler (Univ. of Zürich, CH), Prof. Dr. Rolf Walter (BNI, Hamburg, DE), and Prof. Dr. Heiner Schirmer (Univ. of Heidelberg, DE). Since 2004 Prof. Dr. Paul M. Selzer (Boehringer Ingelheim Animal Health, Ingelheim, DE) is the coordinator of the DDDS transferring the meeting into an international well recognized scientific forum. Exchange of scientific information about anti-parasitic chemotherapy between universities, industry, and other research organizations continues to be important to accelerate anti-parasitic drug development. The DDDS is open to all scientists and professionals interested in the field of anti-parasitic research. The DDDS aims at connecting human and veterinary health by complementary approaches in medical and veterinary parasitology and medicinal chemistry to aim and stimulate One-Health approaches to combat parasitic diseases. The main topics include but are not limited to:

- Target identification, characterization, and validation
- Identification of compounds
- Synthesis and optimization of lead compounds towards marketable drugs
- Testing active compounds in animal models

### **Registration & fees**

The registration fee of 100 € for students (incl. PhD students), 170 € for postdocs, and 250 € for all others includes the program booklet, refreshments & lunches during the whole meeting, a conference dinner, and a welcome snack as well as drinks during the welcome reception on Tuesday evening, March 12<sup>th</sup>, 2024.

**As there is only limited space available, you should register early here:**  
[24th Drug Design & Development Seminar \(DDDS\) 2024 · EVIS.events](https://www.evis.events/24th-DDDS-2024)

**Extended deadline for registration December 15<sup>th</sup>, 2023**

### **Program**

The program will be available end of January 2024.

## **Abstract submission**

To facilitate preparation of the abstract book, please provide the abstract as follows:

- Title, authors, affiliations, E-mail address of corresponding author, abstract text, selected literature citations
- .docx format, Arial font size 11 points, 1.5-fold line spacing
- Maximum: 1 page (A4 size)
- Maximum: 220 words
- References, if appropriate/needed
- Text format example below

In case these guidelines are disregarded, the Scientific Committee reserves the right to return inadequate abstracts to the sender for correction. Keep deadlines in mind, as the selection of topics for presentation will be based on correct abstracts only!

**Extended deadline for abstract submission January 6<sup>th</sup>, 2024**

All correspondence regarding this submission will be sent to you as the submitter. It is your responsibility to communicate this information to any additional authors.

All accepted abstracts will be published in our conference brochure unless you object to this at the time of submission.

## **Abstract example:**

# **Development and *in vivo* efficacy of biocompatible drug-loaded microspheres against *C. parvum***

E. Blanco García<sup>1</sup>, J. Blanco Méndez<sup>1</sup>, F. J. Otero Espinar<sup>1</sup>, H. Gómez Couso<sup>2</sup>,  
E. Ares Mazás<sup>2</sup>, A. Luzardo Álvarez<sup>1</sup>

<sup>1</sup>Departamento de Farmacología, Farmacia y Tecnología Farmacéutica. Universidad de Santiago de Compostela. Spain; <sup>2</sup>Departamento de Microbiología y Parasitología. Universidad de Santiago de Compostela. Spain.

E-mail: [francisco.otero@usc.es](mailto:francisco.otero@usc.es)

Human cryptosporidiosis is one of the most commonly diagnosed protozoan-associated intestinal diseases worldwide. It is one of the main causes of diarrhoe in immunocompromised hosts [1]. There is no completely efficient treatment. Based on previous work [2], an alternative therapy against *Cryptosporidium parvum* using bioadhesive Paromomycin and Diloxanide Furoate (DF)-loaded microspheres was developed. Microspheres (MS) were prepared using chitosan (CHI) and poly(vinyl alcohol) (PVA) and two types of cyclodextrins ( $\beta$ -CD and DM- $\beta$ -CD) for potential use. Microparticle formulations were characterized in terms of size, surface charge, drug release and morphology. *In vivo* bioadhesion properties of CHI/PVA microspheres were also evaluated. In addition, the *in vivo* efficacy of CHI/PVA microspheres against *C. parvum* was tested in neonatal mouse model of cryptosporidiosis.

Microspheres prepared by spray-drying showed spherical shape, diameters between  $6.67 \pm 0.11$  and  $18.78 \pm 0.07$   $\mu\text{m}$  and positively surface charge. The bioadhesion studies demonstrated that MS remained attached at +16h (post-infection) to the intestinal cells. The efficacy of treatment determined in mice receiving orally administered microspheres with and without drug showed significantly lower parasite loads compared with the control.

Our results suggest that microspheres are safe and simple systems for anticryptosporidial treatment. This work demonstrated the high potential of using bioadhesive chitosan/PVA microspheres for antiparasitic drug delivery by oral route in the treatment or prevention of *C. parvum* infections.

[1] Bouzid, M. et al., 2013. Clin Microbiol Rev. 26, 115–34.

[2] Luzardo-Álvarez, A. et. 2012. Eur. J. Pharm. Sci. 47, 215-227.

## Accommodation

We have blocked rooms with the keyword “DDDS” at the following hotels. Please book your room early, as rooms are limited!

Best Western Premier Hotel Rebstock

<https://www.rebstock.com/>

Neubaustraße 7

97070 Würzburg

Phone: +49 931 30930

E-mail: [rebstock@rebstock.com](mailto:rebstock@rebstock.com)

City Partner Hotel Strauss

<https://www.hotel-strauss.de/>

Juliuspromenade 5

97070 Würzburg

Phone: +49 931 30570

E-mail: [anfrage@hotel-strauss.de](mailto:anfrage@hotel-strauss.de)

Hotel Vier Jahreszeiten

<https://vierjahreszeiten-wuerzburg.de/>

Haugerpfarrgasse 3

97070 Würzburg

Phone: +49 931 53815

E-Mail: [info@vierjahreszeiten-wuerzburg.de](mailto:info@vierjahreszeiten-wuerzburg.de)

Motel One

<https://www.motel-one.com/de/hotels/wuerzburg/>

Paradeplatz 4

97070 Würzburg

Phone: +49 931 7304960

E-Mail: [wuerzburg@motel-one.com](mailto:wuerzburg@motel-one.com)

## Funding / Sponsoring

We would like to thank the sponsors of the 24<sup>th</sup> Drug Design & Development Seminar of the German Society for Parasitology (DGP) for their support:

### **Boehringer Ingelheim Vetmedica GmbH**

Binger Straße 173  
55216 Ingelheim am Rhein, Germany  
[www.boehringer-ingelheim.de](http://www.boehringer-ingelheim.de)



### **Merck Ares Trading SA, a subsidiary of**

**Merck KGaA**  
Frankfurter Straße 250  
64293 Darmstadt, Germany  
[www.merck.de](http://www.merck.de)



### **MSD Animal Health Innovation GmbH**

Zur Propstei  
55270 Schwabenheim, Germany  
[www.msd-tiergesundheit.de](http://www.msd-tiergesundheit.de)



### **Invenesis Sàrl**

Rue de Neuchâtel 15A  
2072 St-Blaise (NE), Switzerland  
<https://invenesis.com/>



### **Zoetis Deutschland GmbH**

Schellingstr. 1  
10785 Berlin, Germany  
[www2.zoetis.de/](http://www2.zoetis.de/)



### **EUROIMMUN AG**

Seekamp 31  
23560 Lübeck, Germany  
[www.euroimmun.de](http://www.euroimmun.de)



### **Bayer Animal Health GmbH**

An **Elanco Animal Health** company  
Alfred-Nobel-Str. 50  
40789 Monheim, Germany  
[www.elanco.com/de-de](http://www.elanco.com/de-de)



### **Springer Heidelberg**

Tiergartenstr. 17  
69121 Heidelberg, Germany  
[www.springer.com](http://www.springer.com)

