2020 Abstract Submission Guidelines and Procedures

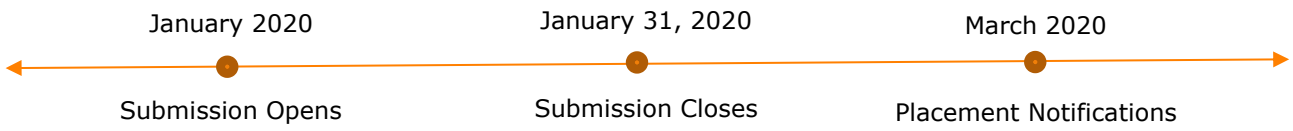
Put a Spotlight on Your Innovative Research!

The 2020 CRS Annual Meeting offers an exceptional opportunity to share your research with an international audience in the discovery, development, and delivery continuum.

Scientific Session Format

Each scientific session will include invited speakers and several oral presentations that are selected from the submitted abstracts. A moderated discussion will follow the presentations. There will also be dedicated poster sessions organized by topic.

2020 Submission Timeline



Important Information to Know Before Submitting

Visa Information

It is the responsibility of the designated presenting author to determine their visa requirements to enter the United States. CRS strongly encourages the presenting author and all future attendees to review visa requirements and begin the visa application (as applicable) as soon as possible. ***Registration fees will NOT be refunded due to inability to obtain a visa.***

Notification

- Acknowledgement of submission will be emailed to the presenting author as the primary contact.
- The designated presenting authors will be notified of the abstract status in **March 2020**. All future communications will be sent to the designated presenting author.
- The designated presenting author must register for the annual meeting and pay the fee.
- If the designated presenting author is not registered, the abstract will be withdrawn and will not be included in the annual meeting program.
- All expenses (e.g. conference registration, airfare, lodging, etc.) associated with the presentation of an abstract are the responsibility of the presenter.

View/Edit/Withdraw Your Abstract

- You may view, edit, or withdraw your abstract submission(s) by using the link provided in the confirmation email sent to the designated author.
- Abstract submissions may be edited or withdrawn until **January 31, 2020**

Abstract Preparation Checklist

- ✓ Abstract prepared and formatted as outlined in the Preparing for Abstract Submission section. Abstracts that are not properly prepared and formatted are subject to automatic rejection.
- ✓ Abstract has not been previously submitted for consideration in other competitions or meetings.
- ✓ Abstract (subject to acceptance) will be presented as placed (Oral Presentation or Poster Presentation) by the CRS Annual Meeting Program Committee.
- ✓ License is granted to CRS to publish the abstract (subject to acceptance) online. Designated presenting author registered for the CRS Annual Meeting and has paid the fee.

Abstract Submission

- If accepted, you will be part of the scientific program in the form of either an oral presentation or poster presentation.
- **Abstracts for the 2020 CRS Annual Meeting will be accepted until January 31, 2020**
- All authors are expected to review this document prior to submitting.

Preparing for Abstract Submission

Author Information

- There is no limit to the number of abstracts an author may submit. If an abstract is accepted, the presenter must be one of the co-authors listed.
- Communications will only be sent to the designated presenting author

Format

- **Abstract body is limited to 400 words** (does not include title, authors, references or acknowledgements)
- **Up to two images uploaded** (optional)
- **In addition to the abstract, provide three (3) Learning Objectives** that at the conclusion of your presentation, meeting participants should be able to do. Use measurable action words and avoid using numbers, bullet points, asterisks, or any other special characters.
- **Abstract of original work – content should be structured into the following sections:**

  Introduction - A brief statement about the purpose of the study and pertinent background.
  Methods - The method(s) of study or data collection employed.
  Results - A summary of study research including sufficient details to support your conclusions.
  Conclusion/Implications - A statement explaining the significance of your work and the implications for further research, practice and/or policy.
  Acknowledgements: In one line, state the supporting grant number and agency name. (optional)
  References: List Author Name(s). Journal Name. Year. Page Number(s).
  Presenter Biography: A brief, 2-3 sentences about the presenting author.

- **Abstract must be written in clear English**.
- If not all data (example: active compound used) can be disclosed due to confidentiality, the abstract will not be rejected immediately; however, the reviewers will decide whether or not it contains enough interesting insights for acceptance.

Session Categories Information

Abstracts should be tagged with a minimum of three (3) keywords and a maximum of six (6) of the following:

Route/Target of Delivery
-Brain/Blood Brain Barrier/Neurological
-Intracellular/Organelles
-Microbiome
-Nasal
-Ocular
-Oral/Buccal/Gastrointestinal
-Pulmonary
-Subcutaneous
-Transdermal/Topical/Mucosal
-Tumor/Cancer

Type of Delivery Agent
-Antibody
-Cannabis/CBD/THC
-Cells
-DNA/RNA
-Drug Conjugate
-Gene Editing
-Imaging Agent
-Immunomodulatory
-Non-Pharmaceutical Agent
-Poorly Soluble
-Prodrug
-Protein/Peptide
-Small Molecule
-Vaccine

Patient Population/Context
-Agricultural/Industrial Product
-Consumer Product
-Digital Medicine
-Global Health
-Neglected/Rare Diseases
-Opioid
-Pediatric
-Personalized Medicine
-Self-Administration/Remote Health Care
-Translational
-Women's Health

Delivery Vehicle
-Biodegradable
-Bioinspired/Biomimetic
-Cell/Virus
-Coating
-Device
-Drug-Drug Combination
-Emulsion/Multiphase
-Exosome
-Hot-Melt Extrusion
-Hydrogel
-Liposome/Micelle/Suspension
-Microparticle
-Nanoparticle/Nanomaterial
-Permeation Enhancer
-Polyethylene Glycol (PEG)
-Rational Design
-Responsive
-Scaffold
-Targeted
-Theranostic

Research Approaches/Methods/Tools
-Animal Model Development
-Clinical Trial/Human Subjects
-Formulation Development
-Mathematical/Computational Modeling
-Microfluidics/Organ-on-a-Chip
-Microscopy/Imaging Tool
-Novel Methods
-Synthetic Biology

Non-Drug Delivery Topics
-Agricultural
-Commercialization/ Entrepreneurship
-Consumer Product
-Cosmetic/Cosmeceutical
-Diagnostic
-Economics
-Ethics/Equity/Diversity
-Food
-Imaging
-Manufacturing
-Nutraceutical
-Regenerative Medicine/Tissue Engineering
-Regulatory
-Stability
-Toxicity

Focus Groups
-Bioinspired and Biomimetic Drug Delivery (BBD)
-Gene Delivery and Gene Editing (GDGE)
-Immuno Delivery (ID)
-Nanomedicine and Nanoscale Drug Delivery (NND)
-Ocular Delivery (OcD)
-Oral Delivery (OrD)
-Transdermal & Mucosal Drug Delivery (TMD)

Terms & Conditions

If the abstract is accepted, I agree that the designated presenting author will present the abstract at the 2020 Controlled Release Society Annual Meeting, June 27 – July 1 in Las Vegas, Nevada and will register and pay the registration fee. Confirm that this is at least in part original work and that the text, figures, and tables included in the abstract have not been published previously. I and any contributing authors, as sole proprietors of the abstract, agree to transfer copyright of the abstract to the Controlled Release Society. By agreeing, I accept this copyright transfer. I understand that failure to accept the copyright transfer will result in the immediate cancellation of my abstract submission.

Review Procedure

All abstracts submitted to the CRS Annual Meeting will go through a rigorous review procedure to maintain the highest scientific quality of the meeting. The abstract will be evaluated by the CRS Annual Meeting Program Committee and will be assigned a rank order based on its scientific content. Some abstracts will be selected for oral presentations during regular scientific sessions. Abstract will be rejected if they do not comply with minimum submission instructions, does not follow the proper format, and/or does not include all required fields.

Submitted abstracts must meet the following minimum requirements:

- Significant and original contribution within the scope of the Controlled Release Society.
- Abstract submitted by the deadline.
- Written in clear English.
- Few syntax/spelling mistakes.
- Sufficient data presented, adequately analyzed and discussed with appropriate conclusions supported by the data. If not all data (example: active compound used) can be disclosed due to confidentiality, the abstract will not be rejected immediately; however, the reviewers will decide whether or not it contains enough interesting insights for acceptance.
- Meets format guidelines.

Criteria for Acceptance

- Abstract has not been previously submitted for consideration in other competitions or meetings.
- The criterion for acceptance of presentation at the CRS Annual Meeting and Exposition is based on a peer-review process. The author must obtain the necessary permissions prior to submission of the abstract.
- The CRS Annual Meeting Program Committee reserves the right to evaluate, accept, or reject any submitted abstract. The committee will determine the status (accept or reject) of all submitted abstracts and the placement (oral or poster presentation) of all accepted abstracts. The committee may also switch abstracts to any topic category based on their evaluation and organization requirements.
- **Presenting author to register by the presenter registration deadline to avoid having the abstract withdrawn from the program.**

Notification

- Acknowledgement of submission will be emailed to the presenting author as the primary contact.
- The designated presenting author will be notified of the abstract status in March 2020. All future communications will be sent to the designated presenting author.
- All expenses (e.g. conference registration, airfare, lodging, etc.) associated with the presentation of an abstract are the responsibility of the presenter.
- **If the abstract is accepted, the designated presenting author must register and pay the fee by *May 1st, 2020***, for the 2020 CRS Annual Meeting, June 27 – July 1, in Las Vegas, Nevada, and must agree to present the abstract at the annual meeting.
- **It is the responsibility of the presenting author to register by the presenter registration deadline. If the designated presenting author is NOT registered by the May 1st, 2020 deadline, the abstract will be withdrawn and will not be included in the program or in the 2020 CRS Annual Meeting online abstract library.** If you do not present your abstract or if your poster is not displayed during the designated poster times your abstract will be removed from the online abstract library.

Abstract Permission

Submission Permissions
Submitting author must obtain the necessary permissions for research prior to abstract submission. The Controlled Release Society does not assume any liability or responsibility for publication of any submitted abstracts.

Copyright Assignment
Submitting author confirms that the abstract is an original work and has not been previously published. The submitter and any contributing authors, as sole proprietors of the abstract, agree to transfer copyright of the abstract to the Controlled Release Society. By agreeing, the submitter accepts the copyright transfer. Failure to accept the copyright transfer will result in the immediate cancellation of the abstract submission.

Copyright Permissions
Publication of tables, charts, and graphs projected onto screens or posted at the annual meeting by anyone other than an author or presenter is prohibited unless a release has been requested and received in writing from an author or presenter.

Agreement to Present
Designated presenting author must agree to present their abstract (subject to acceptance) at the CRS Annual Meeting and Exposition.

Agreement to Register
Designated presenting author of the abstract (subject to acceptance) must register for the annual meeting and pay the fee by May 1, 2020.

Abstract Sample

The title, authors and learning objectives are NOT included in the abstract body 400-word count.

Title: Development and formulation of arsenic-based compounds to treat syphilis

Presenting Author: Paul Ehrlich, Institute of Experimental Therapy, Germany
Co-Authors: Sahachhiro Hata, Kitasato University, Japan; Franziska Speyer, Institute of Experimental Therapy, Germany

Abstract Body – 400-word count *(you will cut and paste this into the text box in the abstract portal)*

Introduction: Syphilis is a sexually transmitted infection caused by the bacterium *Treponema pallidum* and is the cause of ~6 million new cases each year worldwide (1). In addition, more than 300,000 fetal and neonatal deaths are attributed to syphilis. There is a need for better methods and agents to improve treatment of syphilis infection and better prevent its transmission (2). Arsanilic acid is an attractive lead compound for drug discovery of a "magic bullet" that selectively targets *T. palladium*, because of its use in veterinary feed to promote animal growth and prevent dysentery.

Methods: Starting with arsanilic acid as a lead compound, a library of arsenic-based derivatives were synthesized and screened for antimicrobial activity against *T. pallidum*. The most promising candidates were further characterized for physicochemical properties, including aqueous solubility, physical structure, hygroscopicity and stability. Minimum effective dose (ED50) and minimum lethal dose (LD50) were determined in rats.

Results: After screening more than 600 derivatives of arsanilic acid, we discovered arsphenamine to have a low ED50 of 5 μg/kg and LD50 of 200 μg/kg, giving a therapeutic index of 50 in the rat model. Further characterization revealed that arsphenamine was a yellow, crystalline powder with poor water solubility that was hygroscopic and unstable in air. Formulation of the drug in sterile, distilled water for parenteral administration required an oxygen-free environment. Aqueous solutions of arsphenamine were found to be stable for at least 6 months when stored under nitrogen in sealed vials. Guided by the limitations of arsphenamine, a second-generation derivative, neoarsphenamine, was developed, which has increased water solubility and greater stability, but was three-times less effective than arsphenamine, having an ED50 of 12 μg/kg.

Conclusion: Arsphenamine is a promising new drug candidate for treatment of syphilis with high efficacy in the rat model. Although it has stability challenges, it is currently being developed as a new drug called Salvarsan® under license to Hoechst AG.

Acknowledgements: This work was supported by a grant from the Georg Speyer Foundation.

References (up to three): (1) Kojima N, Klausner JD. Curr Epidemiol Rep. 2018:24-38. (2) KJ Williams KJ. J R Soc Med. 2009:343-8.

Presenter biography: Paul Ehrlich is Professor and Director of the Institute of Experimental Therapy in Frankfurt, Germany. He earned an MD at the Charité Medical School. He carries out research in the fields of hematology, immunology, and antimicrobial chemotherapy.

Example of Learning Objectives

These are NOT included in the abstract body word count.

Understand the screening process used to identify arsphenamine as a promising drug candidate
Explain the strengths and weaknesses of arsphenamine for targeted treatment of syphilis
Evaluate the differences between arsphenamine and neoarsphenamine as candidate drugs