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# **국외출장 계획 보고**

**-제70회 미국실험동물학회 참석-**

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**2019. 9**

**산업안전보건연구원  
산업화학연구실**



## I. 출장 목적

- 미국실험동물학회(AALAS)에서 개최하는 70차 미국실험동물학회 심포지엄 및 전시회에 참가하여,
  - 실험동물 관련 최신 정보 수집, 해외 동물실험 선진기관과의 네트워크 구축 및 전문가들과의 컨퍼런스를 통해 최신 연구동향 및 국제적 추세 등의 정보를 교류하고자 함

※ 연구원 흡입독성연구센터는 AAALAC-I 인증을 '18. 3. 7. 취득 - 국제교류 필요

- 미국실험동물학회는 1950년에 처음 발족한 이래 매년 1회씩 학회를 열어, 실험동물의 사용 및 관리, 동물모델 및 복지, 교육 등 질 높은 연구와 정보를 서로 교환해 오고 있으며 이번 학회의 주요 주제는 “One Health-Connections Between Animal, Human, and Environmental Health.”로 다양한 프로그램과 관련 관계부처와 기관 등 연구진들의 참여가 예정되어 있음

## II. 출장 개요

- 학회명 : 70th AALAS National Meeting
- 출장지 : 미국 덴버, 콜로라도 컨벤션센터
- 출장자 및 출장기간

소 속	출장자	출 장 기 간
시험기획부	전혜진 대리	2019년 10월 12일(토) ~ 10월 19일(토) 【5박 8일간】
	최현성 대리	

※ 포럼 : 2019년 10월 13일(일) ~ 10월 17일(목)

- 주 관 : AALAS (American Association for Laboratory Animal Science)

### III. 주요 수행사항

- 주요 포럼 참석을 통한 흡입독성 연구 발전 적용 방안 모색
  - 실험동물 관리에 관한 실용가이드 제안
  - 실험동물을 사용한 연구에 관한 최신 동향, 변화
  - 3Rs의 심화:3Vs(construct validity, internal validity, external validity)
- 국제 연구동향 파악
  - \*AAALAC에서 인정하는 국제적 수준의 실험동물 관리방법 벤치마킹
    - \* AAALAC-I(Association for Assessment and Accreditation of Laboratory Animal Care-International): 실험동물관리 기준에 따라 동물사용 및 관리의 질적 수준을 평가하고 인증하는 국제기관
  - 유사기관의 새로운 동물실험 방법, 사육 시설의 설계 등 파악
  - 실험데이터 품질을 향상시키기 위한 통합적인 접근법 모색
- 산업안전보건연구원 실험동물 관리 방안 모색
  - 실험동물의 취급에 따른 복지 및 윤리위원회 운영·유지 방안
  - 현 동물실험 시설의 유지·관리를 넘어 새로운 개선점 발굴
  - 수의학적 관리(예방 의학, 사육 관리, 마취 및 안락사 등) 방안
  - 관련 작업 종사자의 안전보건 프로그램 등
- 산업안전보건연구원 \*GLP·AAALAC 인증 유지
  - \* GLP(Good Laboratory Practice): 우수실험실운영기준
  - 국제 기관들의 실험동물관련 규정의 최신 개정 사항 파악
  - 동종 인증 기관의 동물실험실의 관리방안 파악
  - 국내외 동물대체시험법의 활용 활성화에 따라 최신정보 습득
- 국내외 주요 관계부처 및 기관 연구진 네트워크 구축
  - 국내외 독성, 실험동물 관련 기관의 참가자들과의 교류를 통한 인적 네트워크 구축 및 정보교환

## IV. 주요일정

일 정	내 용	비 고
'19. 10. 12(토)	<ul style="list-style-type: none"> <li>출국</li> <li>- 인천(12일, 14:30) → 덴버(12일, 16:35)</li> </ul>	현지기준 12일 16:35 도착
'19. 10. 13(일)	<ul style="list-style-type: none"> <li><b>Technical Trade Presentations</b></li> </ul>	-
	<ul style="list-style-type: none"> <li>Facilitating Better Management and Better Research with Digital Enterprise Colony Management Solutions</li> </ul>	-
	<ul style="list-style-type: none"> <li>Unlock Operating Efficiency with Better Cage Change Processes and Digital Technology</li> </ul>	-
	<ul style="list-style-type: none"> <li>Improved Study Workflows and Animal Welfare through the Use of Digital Biomarkers</li> </ul>	-
	<ul style="list-style-type: none"> <li>Documenting and Tracking Processes in Animal Isolators and Cleanrooms: How to Overcome Obstacles</li> </ul>	-
	<ul style="list-style-type: none"> <li>Rodent Surgical Monitoring and Anesthetized Imaging</li> </ul>	-
'19. 10. 14(월)	<ul style="list-style-type: none"> <li><b>WORKSHOPS</b> : Successful Operation of a Gnotobiotics Facility</li> </ul>	-
	<ul style="list-style-type: none"> <li><b>SEMINARS</b> : A Practical Guide to Change Management in the Laboratory Animal Science Environment</li> </ul>	-
	<ul style="list-style-type: none"> <li><b>PANEL DISCUSSIONS</b></li> </ul>	-
'19. 10. 15(화)	<ul style="list-style-type: none"> <li><b>WORKSHOPS</b> : Impacting the Outcome: Novel Leadership/Management Approaches for Today's Vivaria</li> </ul>	-
	<ul style="list-style-type: none"> <li><b>SEMINARS</b> : Reproducibility in Animal Research</li> </ul>	-
	<ul style="list-style-type: none"> <li><b>SEMINARS</b> : Smart Approaches in Animal Facility Management</li> </ul>	-
	<ul style="list-style-type: none"> <li><b>SPECIAL TOPIC LECTURES</b> : Charles River Ethics and Animal Welfare Lecture: More than 3Rs: The 3Vs and the Ethics and Science of Valid and Reproducible Animal Research</li> </ul>	-

'19. 10. 16(수)	○ <b>WORKSHOPS</b> : Introduction to Flexible GI Endoscopy in Laboratory Animals	-
	○ <b>SEMINARS</b> : Who's Driving the 3Rs/Welfare Science and Does It Matter?	-
	○ <b>SPECIAL TOPIC LECTURES</b> : Animal Ethics, Animal Ideology, and the Defense of Animal Research: Why Appealing to Science and the Benefits of Research Have Not Been Working	-
	○ <b>PANEL DISCUSSIONS</b> : The IACUC Role in Veterinary Clinical Trials	-
'19. 10. 17(목)	○ <b>WORKSHOPS</b> : How to Support, Coach, and Motivate New Hire Animal Husbandry Technicians to Reach Their Full Potential	-
	○ <b>SEMINARS</b> : Cephalopods in the Laboratory: An Overview of a Growing Class of Laboratory Animal	-
	○ <b>SPECIAL TOPIC LECTURES</b> : Cleaning and Disinfection as Key Elements of Your Biosecurity Program: Theory and Practice	-
	○ <b>PANEL DISCUSSIONS</b> : Care and Husbandry for Immunodeficient Rodents and How It Can Affect Your Research	-
'19. 10. 17(목) - 10. 19(토)	○ 입국 - 덴버(17일, 19:30) → 인천(19일, 04:50)	한국기준 19일 04:50 도착

※ 세부 컨퍼런스 일정은 [첨부] 참조

## [첨부] 학회 프로그램



The 2019 meeting will be held at the Colorado Convention Center, 700 14th St. Denver, CO., U.S. from October 13-17, 2019. The Spotlight Forum is, "One Health—Connections Between Animal, Human, and Environmental Health.

The One Health concept recognizes that the health of people is connected to the health of animals and the environment. It's a collaborative, multi-sectorial, and trans-disciplinary approach to bring together veterinarians, physicians, ecologists, and many others to learn from each other and monitor and control public health threats and to learn how disease spreads among people, animals, and the environment.

Please join us in exploring and learning from the One Health initiative and how it relates to our work in laboratory animal science. As our 2019 spotlight topic, submissions in this category can include the diverse topics such as the human-animal bond; disease surveillance, prevention, and response; research (both basic and translational); comparative medicine (the commonality of diseases among people and animals, such as cancer, obesity, and diabetes); disaster preparedness and response; communications and outreach; and much more.

### Exhibit Hall Hours

- Monday, October 14, 8:30 a.m. – 5 p.m.  
(8:30 a.m. - Ribbon Cutting Ceremony to open the Exhibit Hall)
- Tuesday, October 15, 9 a.m. – 5 p.m.
- Wednesday, October 16, 9 a.m. – 1 p.m.

## Committees & Events for the AALAS 70<sup>th</sup> National Meeting

*All events at the Colorado Convention Center unless otherwise noted.*

### Friday, October 11

**2019 AALAS Board of Trustees Annual Business Meeting**  
3:00 PM-6:00 PM, Hyatt

**AALAS Executive Committee Meeting**  
9:00 AM-2:00 PM, Hyatt

### Saturday, October 12

**2019 AALAS Board of Trustees Annual Business Meeting**  
8:30 AM-12:00 PM, Hyatt

**AALAS Foundation Board of Directors**  
2:00 PM-5:00 PM, Hyatt

**Allied Trade Association (ATA) Board Meeting**  
3:00 PM-5:00 PM, CC

**Allied Trade Association (ATA) New Product Showcase set-up**  
2:00 PM-6:00 PM, CC

**Exhibit Hall Exhibitor Set-Up**  
10:00 AM-6:00 PM, CC

**LAMA Board Meeting**  
11:00 AM-5:00 PM, Hyatt

**Registration**  
2:00 PM-6:00 PM, CC

### Sunday, October 13

**AALAS Foundation "Celebrate the Pig" photo booth station sponsored by Envigo**  
9:00 AM-5:00 PM, CC

**AALAS Foundation Silent Auction & "Snowboard Freestyle Throwdown" Contest**  
9:00 AM-5:00 PM, CC

**Academy of Laboratory Animal Veterinary Technicians and Nurses' Veterinary Technician Specialist Examination**  
9:00 AM-1:00 PM, CC

**ACLAM Board of Directors**  
7:30 AM-4:00 PM, Hyatt

**ACLAM Exam Committee**  
1:00 PM-3:00 PM, Hyatt

**ACLAM Foundation Committee**  
11:00 AM-1:00 PM, Hyatt

**ACLAM GRAC**  
2:00 PM-5:00 PM, Hyatt

**ACLAM Publications Committee**  
9:00 AM-12:00 PM, Hyatt

**ACLAM Training Program Directors**  
2:00 PM-4:00 PM, Hyatt

**Allied Trade Association (ATA) New Product Showcase**  
7:30 AM-7:00 PM, CC

**Allied Trade Association (ATA) Membership Meeting/Breakfast (Invitation only; RSVP required)**  
8:30 AM-10:30 AM, CC

**ASLAP Board of Directors Meeting**  
12:00 PM-4:00 PM, Hyatt

**ASLAP Career Path - Do's & Don'ts**  
2:00 PM-4:00 PM, CC

**ASLAP Foundation Meeting**  
12:00 PM-1:00 PM, Hyatt

**ASLAP General Membership Meeting**  
4:00 PM-5:00 PM, CC

**Association of Gnotobiotics Meeting**  
3:30 PM-5:00 PM, CC

**Biosafety Subcommittee**  
3:30 PM-4:30 PM, CC

**Camp ACLAM**  
8:00 AM-4:00 PM, Hyatt

**Career Center**  
8:00 AM-5:00 PM, CC

### CMAR Committee

1:00 PM-4:00 PM, CC

**District 8 Council**  
2:00 PM-5:00 PM, CC

**Educational Resources Committee**  
8:00 AM-12:00 PM, CC

**Emerging Leadership Forum (Invitation only; RSVP required)**  
7:00 AM-4:30 PM, Hyatt

**Emerging Leadership Luncheon (Invitation only; RSVP required)**  
12:00 PM-1:00 PM, Hyatt

**Exhibit Hall Exhibitor Set-Up**  
7:30 AM-7:00 PM, CC

**Facilitators Meeting**  
3:00 PM-3:30 PM, CC

**Facility Directors-Yale University**  
8:30 AM-1:00 PM, Hyatt

**Lab Products, Inc./Hydopac Exchange**  
11:30 AM-3:30 PM, CC

**National Meeting Orientation (first time attendees, new members, international attendees)**  
2:00 PM-3:00 PM, CC

**Nominations Committee**  
10:00 AM-11:30 AM, Hyatt

**Online Learning Committee**  
1:00 PM-4:00 PM, CC

**Opening General Session / General Membership Meeting**  
5:00 PM-6:30 PM, CC

**Poster Sessions set-up by presenting author**  
2:00 PM-5:00 PM, CC

**Program Committee Walk Thru**  
4:00 PM-5:00 PM, CC

**Registration**  
7:30 AM-7:00 PM, CC

<p><b>Scientific Advisory Committee</b> 3:00 PM-5:00 PM, CC</p> <p><b>Speaker Ready Room</b> 12:00 PM-5:00 PM, CC</p> <p><b>Technical Trade Presentations - Track I Capitalizing Data Technology</b> 1:00 PM-4:00 PM, CC</p> <p><b>Technical Trade Presentations - Track II Optimizing Operations</b> 1:00 PM-4:00 PM, CC</p> <p><b>Technician Fun Fair</b> 1:00 PM-5:00 PM, CC</p> <p><b>Tecniplast Welcome Breakfast</b> 9:00 AM-1:00 PM, CC</p> <p><b>Vivarium Operational Excellence Network</b> 8:00 AM-3:00 PM, Hyatt</p> <p><b>Welcome Reception</b> 6:30 PM-8:00 PM, CC</p> <p><b>Monday, October 14</b></p> <p><b>AAALAC International Emeritus/Council Networking Reception (Invitation only; RSVP required)</b> 6:00 PM-8:00 PM, Hyatt</p> <p><b>AALAS Foundation "Celebrate the Pig" photo booth station sponsored by Envigo</b> 9:00 AM-5:00 PM, CC</p> <p><b>AALAS Foundation Silent Auction &amp; "Snowboard Freestyle Throwdown" Contest</b> 8:00 AM-5:00 PM, CC</p> <p><b>ACLAM COC Committee</b> 8:00 AM-10:30 AM, Hyatt</p> <p><b>ACLAM Forum Program Committee</b> 10:00 AM-12:00 PM, Hyatt</p> <p><b>ACLAM IT Management Committee</b> 8:00 AM-12:00 PM, Hyatt</p> <p><b>ACLAM Mentoring Committee</b> 3:00 PM-5:00 PM, Hyatt</p>	<p><b>ACLAM New Diplomates Welcoming Committee</b> 1:00 PM-3:00 PM, Hyatt</p> <p><b>ACLAM Outreach Committee</b> 3:00 PM-5:00 PM, Hyatt</p> <p><b>ACLAM Task Force Meeting</b> 1:00 PM-3:00 PM, Hyatt</p> <p><b>ACLAM TBD</b> 3:00 PM-5:00 PM, Hyatt</p> <p><b>ACLAM Training Program Oversight Committee</b> 3:00 PM-5:00 PM, Hyatt</p> <p><b>Allied Trade Association (ATA) New Product Showcase</b> 8:30 AM-5:00 PM, CC</p> <p><b>ASLAP Animal Welfare Committee</b> 4:00 PM-5:00 PM, Hyatt</p> <p><b>ASLAP Annual Luncheon</b> 12:00 PM-2:00 PM, Hyatt</p> <p><b>ASLAP LARC Meeting</b> 12:00 PM-1:30 PM, Hyatt</p> <p><b>ASLAP Vet Student Liaison Committee</b> 5:00 PM-6:00 PM, Hyatt</p> <p><b>Awards - Poster Judging Coordination</b> 9:30 AM-12:00 PM, CC</p> <p><b>Bookstore</b> 8:30 AM-5:00 PM, CC</p> <p><b>Branch Leadership Meeting</b> 4:00 PM-5:00 PM, CC</p> <p><b>Career Center</b> 8:00 AM-5:00 PM, CC</p> <p><b>Certification &amp; Registry Board</b> 2:00 PM-4:00 PM, CC</p> <p><b>District 1 Membership Meeting</b> 5:15 PM-6:15 PM, CC</p>
<p><b>District 2 Membership Meeting</b> 5:15 PM-6:15 PM, CC</p> <p><b>District 3 Membership Meeting</b> 5:15 PM-6:15 PM, CC</p> <p><b>District 4 Membership Meeting</b> 5:15 PM-6:15 PM, CC</p> <p><b>District 5 Council</b> 10:00 AM-12:00 PM, CC</p> <p><b>District 5 Membership Meeting</b> 5:15 PM-6:15 PM, CC</p> <p><b>District 6 Membership Meeting</b> 5:15 PM-6:15 PM, CC</p> <p><b>District 7 Membership Meeting</b> 5:15 PM-6:15 PM, CC</p> <p><b>District 8 Membership Meeting</b> 5:15 PM-6:15 PM, CC</p> <p><b>Editorial Staff Meeting</b> 3:00 PM-5:00 PM, CC</p> <p><b>Exhibit Hall</b> 8:30 AM-5:00 PM, CC</p> <p><b>Exhibit Hall (opening ceremony w/ribbon cutting 8:30 a.m.)</b> 8:30 AM-5:00 PM, CC</p> <p><b>Government Relations Network Meeting</b> 3:00 PM-4:00 PM, CC</p> <p><b>IACLAM Meeting</b> 10:00 AM-12:00 PM, Hyatt</p> <p><b>ICLAS ARC Open Meeting</b> 1:00 PM-2:00 PM, CC</p> <p><b>ICLAS Int'l Consortium</b> 10:00 AM-12:00 PM, CC</p> <p><b>LAWTE General Membership Meeting</b> 3:00 PM-5:00 PM, CC</p>	<p><b>Poster Sessions</b> 8:30 AM-5:00 PM, CC</p> <p><b>Poster Sessions set-up by presenting author</b> 7:30 AM-8:30 AM, CC</p> <p><b>Registration</b> 7:30 AM-5:00 PM, CC</p> <p><b>Research Associates Ad hoc committee</b> 2:00 PM-3:00 PM, CC</p> <p><b>Speaker Ready Room</b> 7:30 AM-4:00 PM, CC</p> <p><b>Technician Fun Fair</b> 8:30 AM-5:00 PM, CC</p> <p><b>Technician Lunch &amp; Learn</b> 12:30 PM-2:00 PM, CC</p> <p><b>Veterinary Tech Student Program</b> 9:00 AM-11:00 AM, CC</p> <p><b>Tuesday, October 15</b></p> <p><b>AAALAC Consultant/Specialist Orientation</b> 7:00 AM-10:30 AM, Hyatt</p> <p><b>AALAS Affiliates Roundtable Conference Breakfast (Invitation only; RSVP required)</b> 7:30 AM-9:30 AM, Hyatt</p> <p><b>AALAS Foundation "Celebrate the Pig" photo booth station sponsored by Envigo</b> 9:00 AM-5:00 PM, CC</p> <p><b>AALAS Foundation Silent Auction &amp; "Snowboard Freestyle Throwdown" Contest</b> 8:00 AM-5:00 PM, CC</p> <p><b>AALAS/FELASA Executive Meeting</b> 10:30 AM-11:30 AM, CC</p> <p><b>Abstract Review Subcommittee</b> 12:00 PM-1:30 PM, CC</p> <p><b>ACLAM General Business Meeting</b> 5:00 PM-7:00 PM, Hyatt</p>



<p><b>ACLAM Mentoring Social</b> 3:30 PM-5:00 PM, Hyatt</p> <p><b>ACLAM New Diplomat Orientation</b> 9:00 AM-11:00 AM, Hyatt</p> <p><b>Allied Trade Association (ATA) New Product Showcase</b> 9:00 AM-5:00 PM, CC</p> <p><b>AREA Teachers Program Invitation only; RSVP required</b> 9:30 AM-1:30 PM, CC</p> <p><b>Awards Committee</b> 1:00 PM-3:00 PM, CC</p> <p><b>Bookstore</b> 9:00 AM-5:00 PM, CC</p> <p><b>Career Center</b> 8:00 AM-5:00 PM, CC</p> <p><b>CLATR Trainee Luncheon</b> 12:00 PM-2:00 PM, Hyatt</p> <p><b>Editorial Review Board Meeting</b> 7:30 AM-8:30 AM, CC</p> <p><b>Exhibit Hall</b> 9:00 AM-5:00 PM, CC</p> <p><b>Government Relations Committee</b> 10:00 AM-11:00 AM, CC</p> <p><b>ILAM Committee</b> 2:00 PM-5:00 PM, CC</p> <p><b>Lab Animal Breeders Meeting</b> 8:00 AM-9:00 AM, Hyatt</p> <p><b>LAS Pro Editorial Advisory Board</b> 3:00 PM-5:00 PM, CC</p> <p><b>Past President's Luncheon</b> 12:00 PM-2:00 PM, Hyatt</p> <p><b>Poster Sessions</b> 9:00 AM-5:00 PM, CC</p>	<p><b>Poster Sessions Reception w/poster award winners announced at 2:30pm</b> 2:00 PM-4:00 PM, CC</p> <p><b>Registration</b> 7:30 AM-5:00 PM, CC</p> <p><b>Speaker Ready Room</b> 7:30 AM-4:00 PM, CC</p> <p><b>Technician Fun Fair</b> 8:00 AM-5:00 PM, CC</p> <p><b>VAVMO &amp; VMU Supervisors Business Meeting/Luncheon</b> 12:00 PM-2:00 PM, Hyatt</p> <p><b>Wednesday, October 16</b></p> <p><b>AAALAC/AALAS/ICLAS International Luncheon (Invitation only; RSVP required)</b> 12:00 PM-2:00 PM, Hyatt</p> <p><b>AALAS Foundation "Celebrate the Pig" photo booth station sponsored by Envigo</b> 9:00 AM-5:00 PM, CC</p> <p><b>AALAS Foundation Live Auction &amp; Appreciation Reception - set-up</b> 3:30 PM-6:30 PM, Hyatt</p> <p><b>AALAS Foundation Live Auction &amp; Appreciation Reception sponsored by Charles River</b> 6:30 PM-8:30 PM, Hyatt</p> <p><b>AALAS Foundation Silent Auction &amp; "Snowboard Freestyle Throwdown" Contest (Snowboard bidding ends at 11am)</b> 8:00 AM-11:00 AM, CC</p> <p><b>AALAS Foundation Silent Auction (Auction ends at 1pm)</b> 8:00 AM-1:00 PM, CC</p> <p><b>ACLAM TBD</b> 1:30 PM-4:00 PM, Hyatt</p> <p><b>ACLAM/ASLAP Program Committee</b> 8:00 AM-12:00 PM, Hyatt</p> <p><b>Allied Trade Association (ATA) New Product Showcase</b> 9:00 AM-1:00 PM, CC</p>
<p><b>Allied Trade Association (ATA) New Product Showcase take down</b> 1:00 PM-5:00 PM, CC</p> <p><b>Bookstore</b> 9:00 AM-1:00 PM, CC</p> <p><b>Career Center</b> 8:00 AM-5:00 PM, CC</p> <p><b>Committee on Technician Awareness &amp; Development</b> 2:30 PM-4:30 PM, CC</p> <p><b>Exhibit Hall Exhibitor Dismantle</b> 1:00 PM-10:00 PM, CC</p> <p><b>Exhibitor Advisory Council</b> 3:30 PM-5:00 PM, CC</p> <p><b>Poster Sessions</b> 9:00 AM-1:00 PM, CC</p> <p><b>Poster Sessions - dismantle</b> 1:00 PM-3:00 PM, CC</p> <p><b>President's Reception (Invitation only; RSVP required)</b> 5:30 PM-6:30 PM, Hyatt</p> <p><b>RBL/NBL Animal Care Meeting</b> 4:00 PM-6:00 PM, CC</p> <p><b>Registration</b> 7:30 AM-5:00 PM, CC</p> <p><b>Speaker Ready Room</b> 7:30 AM-4:00 PM, CC</p> <p><b>Technician Fun Fair - Winner Announced</b> 2:00 PM-, CC</p> <p><b>Thursday, October 17</b></p> <p><b>2019/2020 AALAS Program Committee</b> 2:15 PM-5:00 PM, CC</p> <p><b>AALAS Executive Committee Meeting</b> 9:00 AM-11:00 AM, Hyatt</p>	<p><b>AALAS Foundation Storeroom</b> 12:00 AM-5:00 PM, CC</p> <p><b>Career Center</b> 8:00 AM-2:00 PM, CC</p> <p><b>CMAR Animal Resources Exam</b> 8:00 AM-12:00 PM, CC</p> <p><b>Registration</b> 7:30 AM-12:00 PM, CC</p> <p><b>Speaker Ready Room</b> 7:30 AM-1:00 PM, CC</p>