

**7th Annual Conference
American Council for Medicinally Active Plants
(ACMAP)
June 29 – July 1, 2016**

**Jointly held with the IX Conference of the Latin American and Caribbean
Agricultural and Forestry Biotechnology Network (REDBIO 2016-PERU)
June 27 – July 1, 2016**

Conference Venues:

Wednesday June 29:

Casa Andina Private Collection Hotel
Av. La Paz 463, Miraflores, Lima, Peru

Thursday June 30 and Friday July 1:

Centro de Convenciones del Colegio Medico del Peru “Daniel Alcides Carrion” (Peruvian Medical Association Convention Center “Daniel Alcides Carrión”)
Av. 28 de Julio 776, Miraflores, Lima, Peru

Note: 10-15 minute walking distance between Casa Andina Private Collection Hotel and Centro de Convenciones (see map on last page)

The oficial language of the ACPMAP conference is English.

Spanish-English-Spanish simultaneous translation will be available in selected sessions/talks as indicated in the program.

Detailed ACPMAP sessions are shown below.

For detailed information of REDBIO sessions (June 27-July 1) check www.redbioperu.com.pe
ACMAP and REDBIO registrants have access to ACPMAP, REDBIO and ACPMAP/REDBIO sessions.

WEDNESDAY – June 29

ACMAP FIELD TRIP

8:00 am – 2:00 pm

International Potato Center (CIP)

ACMAP Program Chair: Fabricio Medina-Bolivar, Ph.D. (fmedinabolivar@astate.edu)

www.acmap.org

Updated: June 27, 2016

Advanced registration required
Bus will depart from Casa Andina Private Collection Hotel
(Meet at hotel lobby by 8:00 am; bus will depart 8:15 am)
Peruvian lunch buffet at Casa Andina Private Collection Hotel

ACMAP BOARD MEETING

2:00 pm - 2:30 pm

Casa Andina Private Collection Hotel
(ACMAP Board Members and Conference Chair)

ACMAP REGISTRATION

2:00 pm - 3:45 pm

Casa Andina Private Collection Hotel
(Conference Room – Level 2)
(Travel vouchers to field trip to Cusco/Machu Picchu will be provided at this time – advanced purchased required)

ACMAP SESSION

Casa Andina Private Collection Hotel
(Conference Room – Level 2)

3:45 pm - 4:00 pm

Welcome Remarks
Fabricio Medina-Bolivar, Ph.D. (ACMAP Program Chair, 2014-2015 ACPMAP President, Arkansas State University, USA)

4:00 pm - 4:30 pm

O1. Research on *Lepidium meyenii* (“Maca”): A Hypocotyl from the Peruvian Highlands
Dulce Alarcón-Yaquetto, B.S. and **Gustavo Gonzales**, M.D., Ph.D. (Universidad Peruana Cayetano Heredia, PERU)

4:30 pm - 6:00 pm

Session: Plant Constituents for Obesity and Related Metabolic Disorders
Chair: **Agnes Rimando**, Ph.D. (U.S. Department of Agriculture, USA)
Co-Chair: **Masuko Kobori**, Ph.D. (National Food Research Institute, JAPAN)

4:30 pm - 4:55 pm

O2. “Dietary Quercetin Suppresses Inflammation of Visceral Adipose Tissue and Improves Metabolic Syndrome in Diet-Induced Obese Mice”
Masuko Kobori, Ph.D. (National Food Research Institute, JAPAN)

4:55 pm - 5:20 pm

O3. “Grape Seed Flour and Polyphenols Reduces Metabolic Dysfunction and Numbers of Gut Bacteria in Hamsters and Mice on High Fat Diets”

Wallace Yokoyama, Ph.D. (U.S. Department of Agriculture, USA)

5:20 pm - 5:45 pm

O4. “Hypolipidemic Effect of Soy Foods and their Components”
Yoko Takahashi, Ph.D. (National Food Research Institute, JAPAN)

5:45 pm - 6:00 pm

BREAK

6:00 pm - 6:50 pm

Selected Oral Presentations:

6:00 pm - 6:25 pm

O5. “Cardioprotection with Polyphenols”

Thomas Netticadan, Ph.D. (Canadian Centre for Agri-Food Research in Health and Medicine, CANADA)

6:25 pm - 6:50 pm

O6. “Neuroprotective Role of Antioxidants in Methamphetamine-Induced Dopamine Neurotoxicity”

Syed Ali, Ph.D. (Food and Drug Administration, USA)

ACMAP RECEPTION

7:00 pm - 9:00 pm

Cocktail reception at Casa Andina Private Collection Hotel
(Light hors d’oeuvres will be provided)

ACMAP Presentation

Rao Mentreddy, Ph.D. (2016 ACPMAP President; Alabama A&M University, USA)

Jeffrey Adelberg, Ph.D. (ACMAP Secretary; Clemson University, USA)

Adolfina Koroch, Ph.D. (**Journal of Medicinally Active Plants Executive Editor**; City University of New York, USA)

Fabricio Medina-Bolivar, Ph.D. (ACMAP Program Chair; 2014-2015 ACPMAP President; Arkansas State University, USA)

THURSDAY – June 30

Room A – Convention Center Auditorium

- 8:30 am - 8:40 am** **ACMAP Welcome**
- Fabricio Medina-Bolivar**, Ph.D. (ACMAP Conference Chair, 2014-2015 ACPMAP President, Arkansas State University)
- 8:40 am - 3:30 pm** *Session: **Biodiversity and Biotechnology for Human Health***
(ACMAP and REDBIO joint Plenary Session)
- 8:40 am - 9:00 am* **Opening Remarks**
Chair: Carlos Malpica, Ph.D. (Metabolon Inc., SPAIN)
- 9:00 am - 9:30 am* **O7. “Bioactive Compounds from the Andean and Amazonian Plant Biodiversity”**
David Campos, Ph.D. (Universidad Nacional Agraria La Molina, PERU)
(Talk in Spanish – simultaneous English translation provided)
- 9:30 am - 10:00 am* **O8. “Metabolomics Applied to Personalized Medicine”**
John Ryals, Ph.D. (Metabolon Inc., USA)
- 10:00 am - 10:30 am* **O9. “Valeriana officinalis as a Novel Platform for Plant Natural Product Drug Discovery”**
Joe Chappell, Ph.D. (University of Kentucky, USA)
- 10:30 am - 11:00 am** **COFFEE BREAK**
- 11:00 am - 11:30 am* **O10. “Next Generation Plant-Made Therapeutic Proteins – Exploiting Plant Lectins to Deliver Human Enzymes”**
Carole L. Cramer, Ph.D. (Arkansas State University & BioStrategies LC, USA)
- 11:30 am - 12:00 pm* **O11. “Peanut Hairy Roots: A Sustainable System for the Production and Discovery of Bioactive Compounds for Human Health”**
Fabricio Medina-Bolivar, Ph.D. (Arkansas State University, USA)

12:00 pm - 12:30 pm	O12. “Making the Best Match: Designing Transcriptomics to Understand Plant Metabolic Specialization and Reveal Gene Functions” Keithanne Mockaitis, Ph.D. (Indiana University & Dow AgroSciences, USA)
12:30 pm - 1:00 pm	Discussion
1:00 pm - 2:30 pm	LUNCH BREAK
2:30 pm - 3:00 pm	O13. “Protein-Polyphenol Aggregate Particles: Hypoallergenicity and Food Functionality” Mary Ann Lila, Ph.D. (Plants for Human Health Institute, North Carolina State University, USA)
3:00 pm - 3:30 pm	O14. “Metabolic Engineering of Bioactive Compounds in Tomato” Eugenio Butelli, Ph.D. (John Innes Centre, UNITED KINGDOM)
3:30 pm - 4:00 pm	O15. “Differences in Human Diversity from the Andes: Implications for Human Health Ricardo Fujita, Ph.D. (Universidad San Martin de Porres, PERU)
4:00 pm - 8:30 pm	REDBIO Session: Advances on Genome Editing
4:30 pm - 5:00 pm	COFFEE BREAK
<u>POSTER SESSION</u>	
6:30 pm - 9:00 pm	REDBIO & ACMAP POSTER SESSION

FRIDAY – July 1 (concurrent sessions: rooms D and E)

Room D – Convention Center Level 4 (ACMAP session)

8:30 am - 10:10 am

Session. Micropropagation, Conservation and Sustainable Use of Medicinal Plants

Chair: Jeffrey Adelberg, Ph.D. (Clemson University, USA)

8:30 am - 8:55 am

Keynote Talk:

O16. "Look Under Your Feet! The Wondrous Roots and Tubers of the Andes"

David Ellis, Ph.D. (International Potato Center, PERU)

8:55 am - 9:20 am

O17. "Multifactor Designs to Enable Medicinal Plant Research"

Jeffrey Adelberg, Ph.D. (Clemson University, USA)

9:20 am - 9:45 am

O18. "Advanced Roots System: Unlocking Plant Biodiversity through a High Volume and Low Cost Bioreactor"

Pierre-Antoine Mariage, Ph.D. (Green2Chem, BELGIUM)

9:45 am - 10:10 am

O19. "A Novel Micropropagation System for Stevia Clonal Production on Commercial Scale"

Sudhersen Chellan, Ph.D. (Kuwait Institute for Scientific Research, KUWAIT)

10:10 am - 10:30 am

COFFEE BREAK (Level 4)

Session: Strategies to Increase Levels of Bioactives in Plants

Chair: Lena Galvez, Ph.D. (Universidad Nacional Agraria La Molina, PERU & Pontificia Universidad Catolica de Valparaiso, CHILE)

10:30 am - 10:55 am

Keynote Talk:

O20. "Metabolic Innovations and Fermentation Biology for Medicinally Active Functional Foods"

Kalidas Shetty, Ph.D. (North Dakota State University, USA)

10:55 am - 11:20 am

Keynote Talk:

O21. Bioactivity and Metabolic Engineering of a Nutraceutical"

Agnes Rimando, Ph.D. (U.S. Department of Agriculture, USA)

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Updated: June 27, 2016

- 11:20 am - 11:45 am **O22. Space-Age Technology to Increase Yield and Improve Quality of Traditional Medicinal Plants”**
Gary Stutte, Ph.D. (NASA, USA)
- 11:45 am -12:10 pm **O23. “Effects of Agronomic Treatments on Growth and Essential Oil Composition of Basil”**
Rao Mentreddy, Ph.D. (Alabama A&M University, USA)
- 12:10 pm - 12:35 pm **O24. “Passion Fruit Peel and Sorghum Flour with High Tannin Content as Alternative Fiber- and Antioxidant-Rich Food”**
José Luis Ramírez Ascheri, Ph.D. (Embrapa Food Technology, BRAZIL)
- 12:35 pm - 2:00 pm **LUNCH BREAK**
- 2:00 pm - 3:15 pm **Session: Traditional Knowledge and Use of Medicinal Plants**
Chair: Luis Nopo-Olazabal, Ph.D. (Arkansas State University, USA)
- 2:00 pm - 2:25 pm **O25. “Pharmacist’s View on Medicinal Plants Legal Access”**
Michel Sauvain, Ph.D. (Institut de Recherche pour le Développement, FRANCE)
- 2:25 pm - 2:50 pm **O26. “Use of Medicinal Plants in Primary Health Care: An Experience at the Social Health Insurance of Peru”**
(“Uso de las Plantas Medicinales en la Atención Primaria de Salud: Una Experiencia en el Seguro Social de Salud del Perú”)
Martha Villar Lopez, M.D. (EsSalud, PERU)
(talk in Spanish with English written translation)
- 2:50 pm - 3:15 pm **O27. “Characterization of Phenolic Bioactives from Peruvian Corn (*Zea mays* L.) Diversity”**
Lena Galvez Ranilla, Ph.D. (Universidad Nacional Agraria La Molina, PERU & Pontificia Universidad Católica de Valparaíso, CHILE)
- 3:25 pm - 3:45 pm **COFFEE BREAK (Level 4)**

Room E – Convention Center Level 5 (ACMAP session)

- 8:30 am - 10:10 am** *Session: Plant Bioactives for Cancer Prevention and Therapy*
Chair: Anait S. Levenson, M.D., Ph.D. (Long Island University - Brooklyn, USA)
- 8:30 am - 8:55 am** **O28. “The Polyphenol Resveratrol: A Panacea?”**
Shazib Pervaiz, Ph.D. (National University of Singapore, SINGAPORE)
- 8:55 am - 9:20 am** **O29. “Bitter Melon and Pancreatic Cancer”**
Rajesh Agarwal, Ph.D. (University of Colorado Skaggs School of Pharmacy and Pharmaceutical Sciences, USA)
- 9:20 am - 9:45 am** **O30. “Epigenetic Chemopreventive Nature of Dietary Phytochemicals”**
Anait S. Levenson, M.D., Ph.D. (Long Island University, USA)
- 9:45 am - 10:10 am** **O31. “Chinese Medicinal Plants Inhibit Arthritis by Altering Pathogenic Immune Events”**
Kamal Moudgil, Ph.D. (University of Maryland School of Medicine, USA)
- 10:10 am - 10:30 am** **COFFEE BREAK (Level 4)**
- 10:30 am - 12:35 pm** *Session: Preclinical and Clinical Evaluation of Medicinally Active Plants*
Chair: Rebecca Parr, Ph.D. (Stephen F. Austin State University, USA)
- 10:30 am - 10:55 am** **O32. “Antiplasmodial and Antileishmanial Activities of Herbal *Pseudelephantopus spiralis* (Less.) Cronquist and Isolated Hirsutinolide-Type Sesquiterpenoids”**
Valerie Jullian, Ph.D. (Institut de Recherche pour le Développement, FRANCE)
- 10:55 am - 11:20 am** **O33. “Oregano (*Origanum vulgare*) Extract Improves Intestinal Mucosa Development in Young Individuals”**
Diego Martinez, Ph.D. (LIAN Development and Service, PERU)
- 11:20 am - 11:45 am** **O34. “Seabuckthorn (*Hippophae* spp) for Medicine and Health Food”**

Ashish Yadav, Ph.D. (Indian Council for Agricultural Research, INDIA)

11:45 am - 12:10 pm

O35. "Discovering the Mechanism of Action of Stilbenoids on Rotavirus Infected Cells"

Rebecca Parr, Ph.D. (Stephen F. Austin State University, USA)

12:10 pm - 12:35 pm

O36. "Pharmacokinetics of Phytochemicals: Implications for Clinical Trial Design"

Jeremy Johnson, Ph.D. (University of Illinois at Chicago, USA)

12:35 pm - 2:00 pm

LUNCH BREAK

2:00 pm - 2:20 pm

O37. "Effect of D-004, a Lipid Extract from Cuban Royal Palm (*Roystonea regia*) Fruits on Prostate Hyperplasia and Urodynamic Changes in Experimentally Induced Rats"

Vivian Molina, Ph.D. (National Centre for Scientific Research, CUBA)

2:20 pm - 2:40 pm

O38. "Characterization of the Mechanism of Action of D-004, a Lipid Extract of *Roystonea regia* fruits in Benign Prostatic Hyperplasia"

Yohani Perez, Ph.D. (National Centre for Scientific Research, CUBA)

2:40 pm - 3:25 pm

Session: Selected Student Presentations

Chair: Adolfin Koroch, Ph.D. (City University of New York, USA)

2:40 pm - 2:55 pm

O39. "Bioproduction and Anti-inflammatory Activity of Delta-Tocotrienol-Enriched Extracts from Hairy Roots of Achiote (*Bixa orellana*)"

Jarrod Creameans (Arkansas State University, USA)

2:55 am - 3:10 pm

O40. "Sacha Inchi (*Plukenetia volubilis* Linneo) Oil and its Effects on Growth and Lipid Profile in Rats"

Marlene Julca (Universidad Nacional Mayor de San Marcos, PERU)

3:10 pm - 3:25 pm

O41. "Extraction of Natural Analgesic Compounds from Plants used Traditionally in Mali: Study of *Pericopsis laxiflora*"

Ombeline Dalton (Universite Cleremont-Auvergne, FRANCE)

3:25 pm - 3:45 pm

COFFEE BREAK (Level 4)

Session: Phytochemistry of Medicinally Active Plants

Chair: Rodolfo Juliani, Ph.D. (Rutgers University, USA)

3:45 pm - 4:10 pm

O42. "An Ancient Seed Revisited: Composition of Pine Nuts (*Pinus pinea* L.) Grown in Chile, Argentina, Turkey, Israel, Italy and Spain"

Mariane Lutz, Ph.D. (Universidad de Valparaíso, CHILE)

4:10 pm - 4:25 pm

O43. "Using Headspace Gas Chromatography for the Determination of Volatile Components and Sensory Profiles in Medicinally Active Plants"

Rodolfo Juliani, Ph.D. (Rutgers University, USA)

4.40 pm

ACMAP PICTURE

(Location to be announced)

5:00 pm - 5:30 pm

CLOSING CEREMONY AND AWARDS (Room E, Level 5)

ACMAP CLOSING DINNER AND PERUVIAN SHOW

6:45 pm - 10:30 pm

Bus will depart from Casa Andina Private Collection Hotel

Advanced registration required.

Meet at hotel lobby at 6:45 pm. Bus will depart at 7 pm.

SATURDAY – July 2

ACMAP Optional Field Trip – Advanced Reservation Required

(Day 1- Depart from Lima to Cusco)

SUNDAY – July 3

ACMAP Optional Field Trip

(Day 2- Tour of Cusco)

MONDAY – July 4

Optional Field Trip

(Day 3 - Machu Picchu)

TUESDAY – July 5

Optional Field Trip

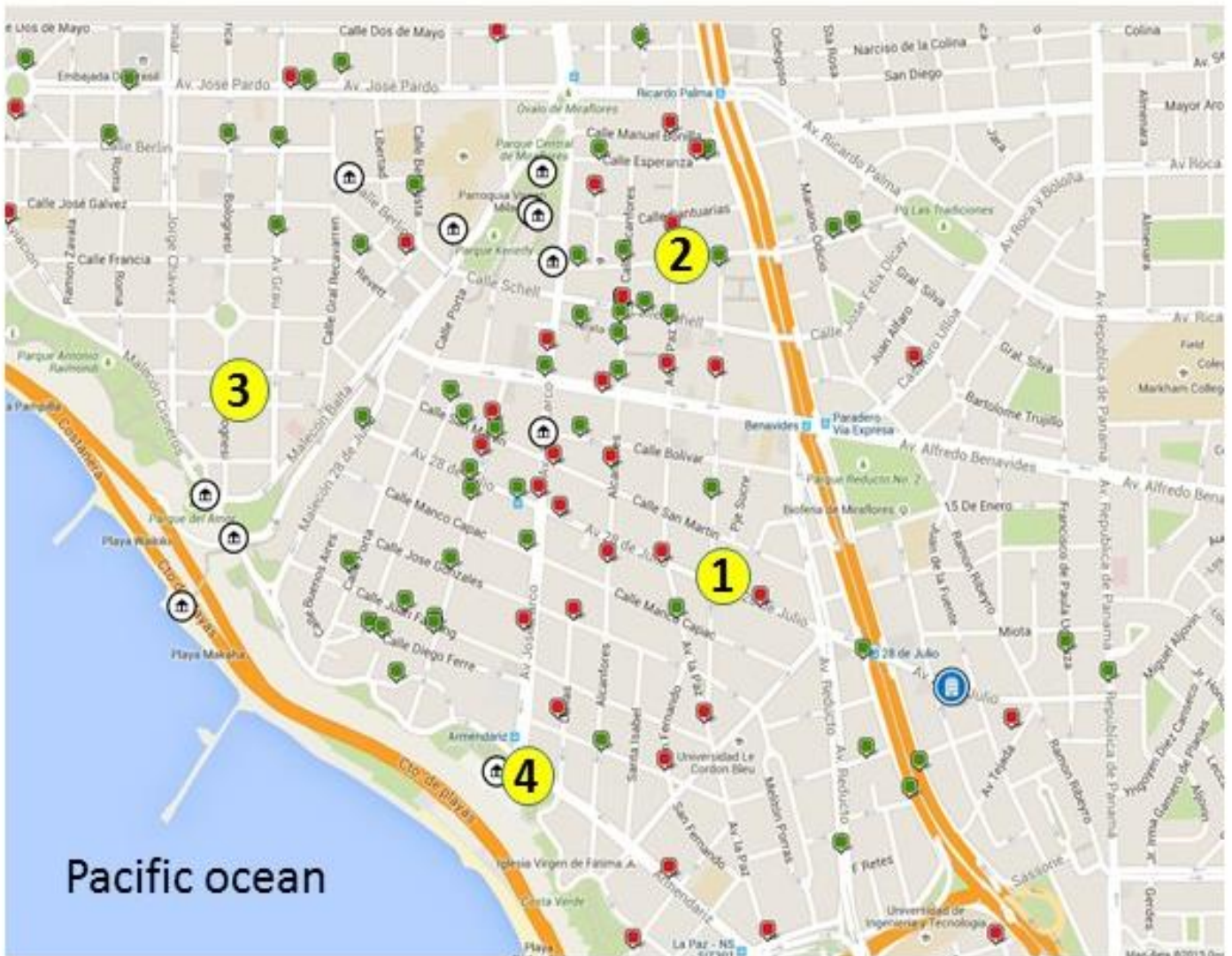
(Day 4 – Depart from Cusco to Lima)

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CONFERENCE VENUES AND LODGING LOCATIONS



1. Convention Center "Daniel Alcides Carrion"
2. Casa Andina Private Collection Hotel
3. Imperial Inn Hospedaje Turistico
4. Larcomar (www.larcomar.com; ocean view shopping and dining area)

Walking distance between:

- | | |
|----------|------------------|
| 1 and 2: | 10 to 15 minutes |
| 1 and 3: | 20 minutes |
| 1 and 4: | 15 to 20 minutes |

Note: Several dining options are available within 5 minutes walking from convention center

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