

## **ANNUAL REPORT SETAC OMICS GLOBAL AG**

By Doris Vidal-Dorsch and Bruno Campos

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### **Executive Summary**

The SETAC OMICS Global Advisory Group was instituted this year with the mission to serve as a forum to discuss challenges and opportunities for OMICs disciplines in environmental sciences. This Advisory Group (AG) was created as a follow up to recent sessions, workshops and discussions held at SETAC meetings in North America and Europe. The main focus of this AG is to set a path towards acceptance and application of molecular knowledge to protect human and ecological health. Our AG proposes to coordinate efforts to further develop OMICs as additional lines of evidence, enhancing the read-across and weight-of-evidence possibilities. These developments are proposed to improve regulatory decision making, setting the way for knowledge based regulation. Several activities including workshops, meetings, white papers and training are currently planned or conducted by our members.

### **Activities Summary**

- Monthly conference calls held the first Monday of the month. Calls conducted to discuss the progress of current activities and to develop new ones.
- Participation on planning and development of a proposal for a Focus Topic Meeting named “High Throughput Screening in Ecological Risk Assessment: State of the Science and Emerging Applications” in coordination with other SETAC Advisory Groups. Meeting has been scheduled to take place in 2017.
- Development of a proposal for a Pellston Workshop “Omics into Regulatory science: The Path Forward” which has been recently reviewed by the SETAC Global Science Committee. Full workshop proposal in development. This workshop has been scheduled to take place in 2018.
- Writing a white paper on the present state of the art and setting near term vision for further development of OMICs technologies on environmental sciences. This manuscript is co-authored by scientist from several countries, expertise and sectors including regulators. This paper is expected to be sent out for publication in 2017.
- Hosted a scientific session in SETAC EUROPE 2016 meeting in Nantes, under the title “Application of a coordinated OMICs research program and data into regulatory frameworks: case-studies and perspectives”.

- Hosted a scientific session entitled “Environmental ‘Omics”, sponsored and organized by members of OMICs AG which will take place in the SETAC-AU meeting in Hobart, Australia in 2016.
- Host a scientific session entitled “Advancing the OMICs into regulatory frameworks: case-studies and perspectives”, sponsored and organized by members of OMICs AG which will take place in the World meeting in Orlando, Florida in 2016.
- Host a scientific session entitled “Environmental OMICS and Molecular Ecotoxicology”, sponsored and organized by members of OMICs AG which will take place in SETAC AP 2016 meeting in Singapore.
- Host a scientific session entitled “Omics as the future of ecotoxicology?” This session has been sponsored and organized by members of OMICs AG which has been pre-approved for the YES Meeting in Stockholm. This meeting has been scheduled to take place in 2017.
- Sponsor a scientific session proposal entitled “METAOMICs in ecotoxicology: increasing our understanding of how contaminants affect earth microbiomes and ecosystems”. Session sponsored and organized by members of OMICs AG for the 2017 Europe SETAC Meeting in Brussels.
- Sponsor a scientific session proposal entitled “21st century Ecotoxicology and Human Toxicology: Applications and perspectives for the use of OMICs data”. Session to be organized by members of OMICs AG for the 2017 Europe SETAC Meeting in Brussels.
- Sponsor business meetings during the France and US SETAC gatherings to discuss current and future OMICs AG activities with our members.
- Participate in the SETAC Advisory Group summits during the SETAC Europe and North America Meetings.
- Search for scientists interested in developing OMICs expertise in Africa and Latin America.

### **Future Plans**

This is the first year of our AG. All initiatives are new and include planning of workshops, meetings, publication and training activities which have been described in the previous section.

## Membership Communications

This AG communicates by phone every month and through emails. The conference calls have been very well attended and successful. Conference calls are followed by minutes communicated by email explaining the items discussed, timelines and who is participating/ leading/ organizing each activity.

**Issues/Problems:** None

## Current Steering Committee

The Steering Committee members are listed in the table below. The Committee is expected to rotate by the end of 2018 since this group has just been formed. We expect that a 3-y term will allow us to complete the short term goals and set up our long term goals.

Committee Member	Contact	GU	Affiliation
Xiaowei Zhang	zhangxw@nju.edu.cn	Asia-Pacific	Academia
Jinhee Choi	jinhchoi@uos.ac.kr	Asia-Pacific	Academia
John Colbourne	j.k.colbourne@bham.ac.uk	Europe	Academia
Erica Brockmeier	ericakar13@gmail.com	Europe	Academia
Ben Brown	benbrownofberkeley@gmail.com	North America	Academia
Natalia Reyer	natalia@icnanotox.org	North America	Academia
Geoff Hodges	geoff.hodges@unilever.com	Europe	Business
Doris Vidal-Dorsch	doriv91@gmail.com	North America	Business
Craig Marvin	craig_marvin@agilent.com	North America	Business
Sharon Hook	sharon.hook@csiro.au	Asia-Pacific	Government
Anthony Chariton	anthony.chariton@csiro.au	Asia-Pacific	Government
Bruno Campos	brunocampus@gmail.com	Europe	Government
Omar Zapata	ozapata@mda.cinvestav.mx	North America	Government
Adam Biales	biales.adam@epa.gov	North America	Government
David Brew	dbrew@uga.edu	North America	Student
Roel Evens	roel.evens@setac.org	Europe	SETAC Liaison

**No. active members:** Approximately 20; **Total membership:** 45