



# Newsletter for PhDs in Marine Sciences

No. 4 // March 2016

Dear all,

see in this issue who the new GEOMAR Dokteam is - and read about what happened during the first quarter of the year!

Enjoy this newsletter!

Best wishes,  
Wiebke, the DokTeam and the ISOS Reps



mailing list "phd-news":

information of general interest for the PhD community (e.g. job advertisements, summer schools and conferences) are shared.

More information on how to subscribe:  
[www.futureocean.org/isos](http://www.futureocean.org/isos)



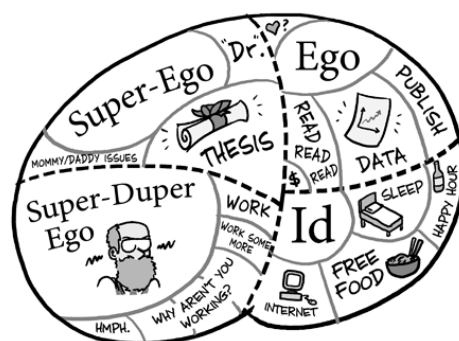
## // Have you met:

### Kristin Burmeister



>>I am part of the DokTeam, since I think it is important, that PhD candidates have a voice and ISOS offers the opportunity to connect the PhD candidates with each other.<<

Kristin works in the working group of Prof. Joke Lübbecke on oxygen minimum zones and is excited about bringing her own work and ideas into the scientific community.  
[kburmeister@geomar.de](mailto:kburmeister@geomar.de)



The Grad Student Brain

"Piled Higher and Deeper" by Jorge Cham [www.phdcomics.com](http://www.phdcomics.com)

[WWW.PHDCOMICS.COM](http://WWW.PHDCOMICS.COM)

### Xiaojun Long



Xiaojun's PhD project deals with volcanism in the Atlantic Ocean, advised by Prof. Kaj Hoernle. In his free time he enjoys carving, taking photos and travelling.  
[xlong@geomar.de](mailto:xlong@geomar.de)

## Upcoming Disputations: Good luck!

Sonakshi Mishra (23.03.2016; GEOMAR - Biogeochemistry)

Corinna Breusing (04.04.2016; GEOMAR - Marine Ecology)

## New Alumni: Congratulations!

Lothar Schlüter (GEOMAR - Marine Ecology)

Sören Thomsen (GEOMAR - Physical Oceanography)

Carolin Paul (GEOMAR - Marine Ecology)

Franziska Werner (GEOMAR - Marine Ecology)

Lisa Vielstädte (GEOMAR - Geoscience)

Michael Kisiela (CAU - Marine Medicine)

Jessica Gier (GEOMAR - Biogeochemistry)

### Francisco Barboza



You can meet Francisco in the lab of Prof. Martin Wahl, where he works on the change of communities along salinity gradients in the Baltic Sea. He is excited about working with scientists from different disciplines. Besides research, he loves playing soccer and basketball.

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// PhD activities

ISOS Miniproposal

In 2015, Mohammad Hadi Bordbar applied for a Miniproposal to go to Australia. Here, he reports about his work on Tropical Pacific Climate Projections:

Uncertainty in Tropical Pacific Climate Projections Due to Chaotic Atmospheric Forcing and Initial Conditions

contact: Mohammad Hadi Bordbar, PhD candidate (mbordbar@geomar.de)

Despite the ongoing increase in anthropogenic CO<sub>2</sub> emission, globally averaged surface air temperature does not show significant warming during the last decade. Large part of this hiatus in global warming is attributed to cooling in the central and eastern tropical Pacific and intensification of Pacific Walker Circulation which is not reproduced by many climate models. Using the Kiel Climate Model (KCM) ensemble of global warming experiments initialized from different climate states, we detected large uncertainty over the tropical Pacific and realized that some ensemble members capturing the recent observed changes reasonably well. It was the main motivation of the mini-proposal to explore whether this result could be confirmed with other climate models employing a similar experimental set-up. Due to their extensive expertise in climate modeling and outstanding research in the tropical climate, I decided to accomplish this work in collaboration with Matthew England and his research group in the Climate Change Research Center (CCRC) of the University of New South Wales, Sydney. The visiting programme was most fruitful and produced conclusive results. Our findings indicate the

dominant influence of long-term internal variability, primarily originating from stochastic atmospheric processes, in the 21st century tropical Pacific climate projections. Our results outline the large influence of the Pacific mid- and high latitudes on the strength of the tropical Pacific Trade winds. We also found that the ocean has decadal-scale memory from the initial climate state in large parts of the tropical sector, which may provide new insight for advancing tropical climate predictability. I have the intention of advancing my research which started with the mini-proposal and collaborating further with the CCRC.



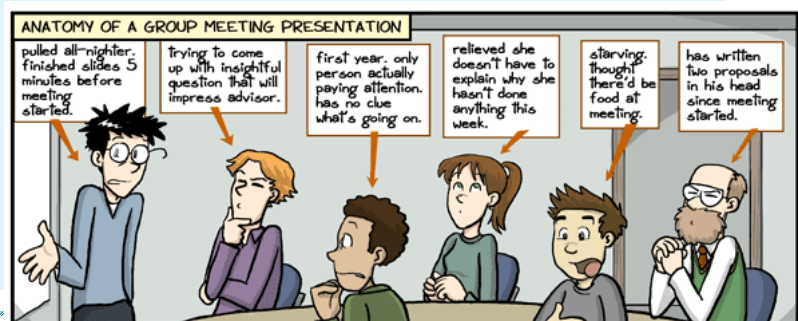
Initializing, writing and carrying out the miniproposal was a valuable experience for me in developing and implementing my own innovative ideas, which is an essential step for being an independent researcher. Practically, I learned how to manage the time-schedule to fulfill the anticipated milestone in an efficient way. Furthermore, the CCRC interacts closely with the public media which was a great opportunity for me to find out how influential my research is on the views of the general public about the concept of human-induced climate change and global warming.

Workshop on Scientific Storytelling

contact: Tina Dippe; PhD candidate (tdippe@geomar.de)

In December, I offered a mini workshop on Scientific Storytelling to PhD candidates. In my experience, early-career scientists often struggle with their writing: What, exactly, makes a story? How do I define the leitmotif of my publication? How do I weave the various bits and pieces of my research into a coherent scientific narration? Having researched creative writing methods and the "dynamics of storytelling" for more than a decade as a hobby, I tackled these questions by raising another one: Could the methods of creative storytelling - applied usually to entertainment products such as movies, novels, TV series - be of any use for scientists? During the

mini-workshop, I reviewed the concept of the Hero's Journey and mirrored it in the standard structure of a scientific publication. Although scientific texts are usually much more strictly structured than the stories of entertainment, the basic elements of the Hero's Journey can still be identified. In other words: Despite pursuing entirely different goals, scientific and creative texts follow the same basic principles when it comes to telling their stories.



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## Accompanying a School Class Excursion to Sylt

contact: Jan-Lukas Menzel Barraqueta, PhD candidate  
 (jmenzel@geomar.de)

The PhD-programme of the ISOS (Integrated School of Ocean Science) offered an excellent opportunity to accompany a school class to their annually excursion to the AWI (Alfred Wegener Institute) marine station in Sylt. The class (12th grade) came from the Gemeinschaftsschule Friedrichsort where they do their A-levels in biology. The excursion took place on the first week of February (1.2 to 5.2) and the students had the opportunity to see the daily work of scientists, learn about mudflats ecology, collect and process samples as well as interviewing scientists about their work.

I arrived on Sylt on the evening of the 2.2 and stayed two days with the school class. At the time of arrival, the students were preparing dinner at AWI guest house after having collected samples on the research vessel "Mya". My duties on the excursion were to explain and give insights into the work we do at GEOMAR. For that goal, on Wednesday morning I gave a talk about ocean acidification, iron fertilization and the role of nutrients and trace metals on marine primary production. The students were divided into different groups and after the talk two different groups interviewed me for about 15 minutes each. In the interview they wanted to know why I decided to do science, how I started, where I studied and many other questions that might allow them to make a decision concerning their studies in the near future.

Due to the windy and rainy weather we needed to cancel the mudflat walk and postponed it to Thursday. Instead of

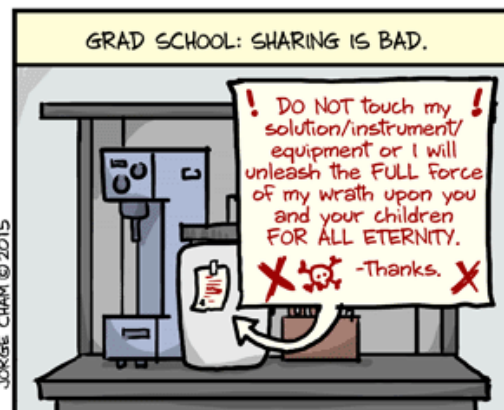
that, we walked along the dunes and until the beach trying to look for any interesting material washed off on the coast in the afternoon.

On Thursday morning, the different groups gave a short presentation on the fauna (crabs, mussels, fish) found during the sampling on Tuesday. It was really nice to see how they compiled information and were able to explain their classmates more about the different species they collected. In the afternoon, the tide finally allowed us to do the mudflat excursion. One of the marine technicians of AWI (Frau Hussels) came with us and explained the biological diversity found in the mudflats. We collected different samples and brought them back to the lab for processing. With all the different information that the students gathered from the different scientists as well as from the excursion leader (Dr. Reimert Neuhaus) they needed to create 2 minutes stop motion movies as part of their evaluation.

The two days passed quickly - on Thursday evening I took the train back to Kiel after saying goodbye to the students and Reimert Neuhaus. It was a really nice opportunity and I hope in the following years more PhD´s candidates will have the option to accompany the next generation of scientists, show them their experience and give them insights for their forthcoming decisions.



"Piled Higher and Deeper" by Jorge Cham www.phdcomics.com



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// ISOS

**From PhD to Staff Scientist**

contact: Enno Prigge; ISOS (eprigge@uv.uni-kiel.de)

» *Having a PhD comes in as a huge plus when working so closely with administration and politics!*«

Dr. Sebastian Krug, "From PhD to... Climate Protection Manager"

The implications of climate change were integral parts of Dr. Sebastian Krug's daily routine, when looking at "Coccolithophores in an acidifying Ocean" during his PhD thesis at GEOMAR. Today, working as a Climate Protection Manager, climate change is still the focus of Sebastian's attention, but instead of analyzing the potential to adapt, he is now trying to convince an entire governmental district that small changes can significantly reduce CO<sub>2</sub> emissions. Having a PhD came in as an advantage when he applied for the job, but Sebastian thinks it was rather the title itself and what is associated with it than the topic of his thesis. He highlights "When planning to restructure public transportation to save CO<sub>2</sub>, working with Coccolithophores wasn't much of a preparation". For Sebastian, working as a

Climate Protect Manager requires a broad scientific background, high levels of motivation and idealism and the ability and willingness to think outside the box. "One of the most important qualities to possess when working as a Climate Protection Manager is persistency! Changing people's behavior most of time is way harder than anticipated."

Leaving academia came with changes to Sebastian's work routine to which he is still trying to adapt. "There are huge differences between working in academia and administration and not even being able to work on my emails from home stills feels strange" he says. However, Sebastian does not regret the transition out of academia, because as a Climate Protection Manager he feels able to make a difference and to introduce long-term changes to the broad public behavior.



**ISOS PhD representatives**

(contact: phd\_reps@isos.uni-kiel.de)

By receiving input, feedback and ideas from the PhD community, we (together with you) have the direct opportunity to shape ISOS and their offers.

Besides that, the rep-team takes part in...  
 ... ISOS steering committee meetings, where we discuss the direction ISOS is heading for  
 ... Future Ocean executive board meetings, where we even have a vote!  
 ...and we work close with the GEOMAR DokTeam.



Kerstin  
KIEL UNIVERSITY  
Geosciences



Meike  
GEOMAR  
Geoscience



Fabian  
GEOMAR  
Biogeochemistry



Tobias  
MUTHESIUS  
Spatial Strategies

**Upcoming ISOS Courses**

09 + 10 May 2016  
**Ocean Data View**  
 Prof. Dr. Birgit Schneider, CAU

17 - 20 May 2016  
**Matlab Intro**  
 M. Sc. Joscha Reimer, CAU

24 + 25 May 2016  
**Scientific Writing**  
 Justin Mullins & Mark Buchanan,  
 Write About Science, London



Register online at [www.futureocean.org/isos](http://www.futureocean.org/isos)

## // DokTeam GEOMAR

Dear PhD colleagues,

We are the new DokTeam and represent around 200 other PhD candidates at GEOMAR.

We're your contact to the directorate, the administration but we also have contacts in the other 18 Helmholtz associated centers across Germany. We organize social events so that you can meet other PhD candidates and enjoy your time in Kiel. Our work is for you to profit from a PhD community as much as possible. We're here for you and we're fighting your corner!



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## Helmholtz Juniors Annual Meeting 2016, Oberpfaffenhofen

contact: [drusiecka@geomar.de](mailto:drusiecka@geomar.de)

Helmholtz Juniors (HeJu) represent the views of 6400 PhD candidates from 18 Helmholtz Associated research centres. Our main goal is to exchange information, improve the network between centres and working conditions of the PhD candidates.

This year's Helmholtz Juniors annual meeting took place at the DLR (National Aeronautics and Space Research Centre of the Federal Republic of Germany) in Oberpfaffenhofen from 3rd – 5th of February. HeJu group speakers from 2015 gave presentations on the achievements of their respective groups. The main highlights were the evaluation of the current PhD contract/stipend situation across 18 Helmholtz associated institutes, establishment of a secure HeJu budget and a future of the PhD day event organised by HeJus.

On the second day we had an opportunity to attend the talks focused on the DLR Graduate Programme, Leibniz Graduate Programme and improvements within the PhNet (Max-Planck society PhD representatives). We also had an amazing guided tour around the DLR site (German 'NASA' and Robotics department).

On the third day we summarised everything and set our goals for the next 12 months. The meeting was finalised with the election of the new working group speakers and two new lead speakers: Elias Eckert (DKFZ) and Dagmara Rusiecka (GEOMAR).

At the end of February lead speakers had a meeting

with the President of the Helmholtz Association, Prof. Otmar D. Wiestler to address the main issues occurring in the Helmholtz PhD community such as: improvement of the stipend holders working conditions within the Helmholtz Association and the financial complications of the PhD Day event. Prof. Wiestler stressed the high importance of the PhD community, assured further discussions on situation of the stipend holders and full financial support of the Helmholtz Association for the PhD Day event. Great news!

More information on the PhD Day to follow soon!

More information:

[www.helmholtz.de/hejus](http://www.helmholtz.de/hejus)

[www.phdnet.mpg.de/cms](http://www.phdnet.mpg.de/cms)

Do you have problems during your PhD which you want to address to the directory or the administration?

Do you have ideas to improve work or social life of PhD's at GEOMAR?

Are you wondering whether or not PhDs at other Helmholtz centres have the same problems?

Would you like to see your interests presented at the scientific council? Then please contact us!

[dokteam@geomar.de](mailto:dokteam@geomar.de)

[www.geomar.de/studieren/phd/dokteam/](http://www.geomar.de/studieren/phd/dokteam/)

Do you want to meet other PhD candidates?

Then come to our social events organized every month!