

# Qualifications Form for Public Display

## 1. Contact Information

**Name:** Brooke N. Bowersox

**Title:** Animal Care Program Supervisor

**Affiliation:** Clearwater Marine Aquarium

**Business e-mail address:** bbowersox@cmaquarium.org

**Business phone number:** 727-441-1790 x 2238

## 2. Table 1. Relevant Education

Degree	Major/Field of Study	Institution and Location	Year Received
Bachelor of Science	Oceanography	University of West Florida Pensacola, Florida	2013

## 3. Relevant Experience

### A. Table 2. Relevant Professional History

Job Title	Role	Affiliation	Location (City, State, Country)	Dates (MM/YY- MM/YY)
Animal Care Program Supervisor	Marine Mammal Department Supervisor/Trainer	Clearwater Marine Aquarium	Clearwater, Florida, USA	10/2013-present
Aquarist	Aquarist	Key West Aquarium	Key West, Florida, USA	12/2010-12/2012

**B. Summary of Experience**

Table 3. Summary of Experience.

<b>Procedures</b>	<b>Experience Metrics: Estimated Number of Animals, Hours/Months/Years, Species, and Age Class</b>	<b>Most Recent Year Performed</b>	<b>Level of Experience</b>
Transport	<i>Successful air transportation of 1 bottlenose dolphin and 5 ground transportations (2 bottlenose dolphins, 3 rough-toothed dolphins) over 10 years. Transports included both subadult and adult animals.</i>	2022	Level 2
Restrain	<i>Restrained, both hand and net, rough-toothed dolphins and bottlenose dolphins as necessary for medical procedures or transports over the course of 10 years.</i>	2024	Level 4
Observation, behavior or monitoring	<i>Conducted behavioral observation and monitoring consistently on 3 rough-toothed dolphins and 8 bottlenose dolphins in a managed care facility, over the course of 10 years.</i>	2024	Level 4
Measure and weigh	<i>Over the course of 10 years, conduct quarterly measurements and weekly weights (floor scale and hanging scale on stretcher) consistently on both subadult and adult bottlenose dolphins and rough-toothed dolphins.</i>	2024	Level 4
Sample, biological Sample, exhaled air	<i>Trained for voluntary sample collection and collected samples of fecal, urine, and exhaled air. Conducted through the course of 9 years with multiple cetaceans with varying ages.</i>	2024	Level 3

**4. Relevant Training, Certificates, or Licenses**

- Advanced Open Water Diver
  - PADI
  - Certification Date: 06/15/2010
- Heartsaver First Aid CPR AED
  - American Heart Association
  - Issued 02/28/2022
  - Renew by 02/2024

**5. Relevant Reports, Publications, or Presentations**

N/A

# Qualifications Form for Public Display

## 1. Contact Information

**Name:** Camelle P. Zodrow

**Title:** Animal Care Program Manager

**Affiliation:** Clearwater Marine Aquarium

**Business e-mail address:** czodrow@cmaquarium.org

**Business phone number:** 727-441-1790 x2288

## 2. Table 1. Relevant Education

Degree	Major/Field of Study	Institution and Location	Year Received
Bachelor of Science	Zoology	University of South Florida	1998

## 3. Relevant Experience

### A. Table 2. Relevant Professional History

Job Title	Role	Affiliation	Location (City, State, Country)	Dates (MM/YY- MM/YY)
Animal care Program Manager	Oversee the Marine Mammal Department / Animal Care	Clearwater Marine Aquarium	Clearwater, FL, USA	4/2011-current
Senior I Trainer	Animal care and guest interactions	Discovery Cove	Orlando, FL, USA	2/2001-4/2011

**B. Summary of Experience**

Table 3. Summary of Experience.

<b>Procedures</b>	<b>Experience Metrics: Estimated Number of Animals, Hours/Months/Years, Species, and Age Class</b>	<b>Most Recent Year Performed</b>	<b>Level of Experience</b>
<i>Transport</i>	<i>Successful planning and execution of ground transport of 2 tursiops truncatus and 1 steno bredanensis (sub adult and adult)</i>	<i>2023</i>	<i>4 current level</i>
	<i>Successful planning and execution of air transportation 1 sub adult tursiops truncatus</i>	<i>2023</i>	<i>3</i>
	<i>Successful ground transport of 1 tursiops truncatus and 2 steno bredanensis</i>	<i>2019</i>	<i>2</i>
<i>Measure and weigh</i>	<i>Over the course of 23 years, conduct quarterly measurements and weekly weights (floor scale and hanging scale on stretcher) consistently on both subadult and adult tursiops truncatus and 3 steno bredanensis</i>	<i>2023</i>	<i>4 current level</i>
<i>Collect samples (blood, stomach, urine, blow, fecal)</i>	<i>Over the course of 23 years, have collected biological samples on both subadult and adult tursiops truncatus and steno bredanensis</i>	<i>2023</i>	<i>4 current level</i>
<i>Observation and behavior</i>	<i>For 23 years conducted behavioral observation and monitoring on approximately 60 tursiops truncatus and 3 steno bredanensis</i>	<i>2023</i>	<i>4 current level</i>
<i>Restraint</i>	<i>Restrained, both hand and net, steno bredanensis and Tursiops truncatus as necessary for medical procedures or transports over the course of 23 years</i>	<i>2023</i>	<i>4 current level</i>

**4. Relevant Training, Certificates, or Licenses**

- Open Water Diver
  - NAUI
  - Certification Date: 1995
- Heartsaver First Aid CPR AED
  - American Heart Association
  - Issued 02/28/2022
  - Renew by 02/2024

**5. Relevant Reports, Publications, or Presentations** (Optional; 2 page maximum)

N/A

# Qualifications Form for Public Display

## 1. Contact Information

**Name:** Shelly A Marquardt

**Title:** Vice President of Animal and Environmental Health

**Affiliation:** Clearwater Marine Aquarium

**Business e-mail address:** smarquardt@cmaquarium.org

**Business phone number:** 727-441-1790 x 299

## 2. Table 1. Relevant Education

Degree	Major/Field of Study	Institution and Location	Year Received
<i>DVM</i>	<i>Doctor of Veterinary Medicine</i>	<i>University of Wisconsin Veterinary School, Madison, WI</i>	<i>2006</i>

## 3. Relevant Experience

### A. Table 2. Relevant Professional History

Job Title	Role	Affiliation	Location (City, State, Country)	Dates (MM/YY- MM/YY)
<i>VP of Animal and Environmental Health</i>	<i>VP of Animal and Environment al Health</i>	<i>Clearwater Marine Aquarium</i>	<i>Clearwater, FL, USA</i>	<i>9/23- present</i>
<i>Senior Veterinarian</i>	<i>Senior Veterinarian</i>	<i>Clearwater Marine Aquarium</i>	<i>Clearwater, FL, USA</i>	<i>10/15-present</i>
<i>Volunteer</i>	<i>Volunteer Stranding Veterinarian</i>	<i>Clearwater Marine Aquarium</i>	<i>Clearwater, FL, USA</i>	<i>2/11-10/15</i>
<i>Veterinary Extern</i>	<i>Veterinary Extern</i>	<i>Marineland Canada</i>	<i>NiagaraFalls, Ontario, Canada</i>	<i>8/05 &amp; 11/05</i>

## B. Summary of Experience

Table 3. Summary of Experience.

Procedures	Experience Metrics: Estimated Number of Animals, Hours/Months/Years, Species, and Age Class	Most Recent Year Performed	Level of Experience
Transport	Over 12 years, successfully transported by ground (3) juvenile rough toothed dolphins, (1) adult pygmy killer whale, (2) adult short-finned pilot whales; successfully transported by air (1) juvenile bottlenose dolphin	2023	3
Cetacean Medicine and Emergency Response	Provide daily health monitoring and medical care for (6) bottlenose dolphins and (3) rough-toothed dolphins of various age classes over 8 years including blood, blow, gastric and fecal sample collection/analysis, ultrasound, radiography, injections (SC, IM, IV) and emergency treatment	2024	4
Pinniped Medicine	Performed blood collection, ultrasound and administered IM and SC medications on (3) California sea lions	2013	2

## 4. Relevant Training, Certificates, or Licenses

- Florida Veterinary License, 2010- present
- USDA APHIS Category II Accreditation, 2015- present
- USDA DEA license, 2015- present
- Trained in cetacean medicine and transport by Dr. Mike Walsh with University of Florida, 2015-2019
- Cetacean Anesthesia Training, IAAAM, 2023
- Cetacean Ultrasound Training, Dr. Marina Ivancic, 2017
- Pinniped Diagnostic Training, IAAAM, 2013

## 5. Relevant Reports, Publications, or Presentations

- Fahlman A, Rhieu K, Alessi B, **Marquardt S**, et al. "Resting metabolic rate and lung function in fasted and fed rough-toothed dolphins, *Steno bredanensis*." Marine Mammal Science. Jan 2024; 40(1): 210-221
- Marquardt, S, Walsh, M, et al. "Intestinal Torsion in a Bottlenose Dolphin (*Tursiops truncatus*)."  
International Association of Aquatic Animal Medicine Conference 2022. Virtual conference presentation.
- Weisbrod, TC, Walsh, MT, **Marquardt, S**, Giglio, RF. 2020, Computed Tomography Diagnosis of Pneumothorax and Cardiac Foreign Body Secondary to Stingray Injury in a Bottlenose Dolphin (*Tursiops truncatus*). Aquatic Mammals 46(3), 326-330
- Herring, H., **Marquardt, S.**, et al. "Hematologic, biochemical, and cytologic findings from two rehabilitated Atlantic Spotted dolphin calves (*Stenella frontalis*)."  
Fifth Florida Marine Mammal Health Conference. Clearwater Marine Aquarium. Hilton University of Florida, Gainesville. 2-4 June 2015. Poster presentation.

# Qualifications Form for Public Display

## 1. Contact Information

**Name** (first, middle initial, last): Robert Gojceta

**Title:** Curator of Marine Mammals

**Affiliation:** Oceanographic

**Business e-mail address:** rgojceta@oceanographic.org

**Business phone number:** +30 694 0262 359

## 2. Table 1. Relevant Education

Degree	Major/Field of Study	Institution and Location	Year Received
Scientific High School	n/a	College Saint-Roch, Belgium	1990

## 3. Relevant Experience

### A. Table 2. Relevant Professional History

Job Title	Role	Affiliation	Location (City, State, Country)	Dates (MM/YY-MM/YY)
<i>Curator of Marine Mammals</i>	<i>Oversee teams who work with marine mammals at the Dolphinarium, pinniped, and Arctic habitats</i>	Oceanografic	Valencia, Spain	03/2024 - Current
Curator of Marine Mammals	General staff management, animal training, development of commercial activities, oversee enrichment for cetaceans and pinnipeds	Attica Zoological Park	Athens, Greece	2012-2024
Curator of Marine Mammals	Oversee animal and staff management for bottlenose and Risso's dolphins	Oltremar	Oltremar, Italy	2004-2011
Trainer	Responsible for animal training and shows with Atlantic bottlenose dolphins and pinnipeds	Narvalo SRL	Narvalo, Italy	

**B. Summary of Experience**

Table 3. Summary of Experience.

<b>Procedures</b>	<b>Experience Metrics: Estimated Number of Animals, Hours/Months/Years, Species, and Age Class</b>	<b>Most Recent Year Performed</b>	<b>Level of Experience</b>
8 – Air Transport	17- Tursiops truncatus, 4 – CSL	2016-current	4
Mixed (Ground and Air)	25 - Tursiops truncatus (6 months to 40+ years), 12+ pinniped (CSL, Patagonian, Harbor Seal)	1995-2011	2 & 3
1-Ground	2 - West Indian Manatee	2009	2
1 – Ground	1 - Grampus	2005	3
Observation	Variety of marine mammals to include pinniped and cetacean	1992	1-4
Sampling	Cetacean and Pinniped: Blood, fecal, gastric, blow, urine, milk, x-ray, CT	2001	3 & 4
Administer drugs	Cetacean and Pinniped: IM, IV, subcutaneous, topical	2004- current	1-2
Measure and Weight	Cetacean and Pinniped	1992	1-4
Ultrasound	Cetacean and Pinniped	1995 - current	1
Restraint	Cetacean and Pinniped (board, cage, hand, and net)	1992 - current	1-4
Anesthesia	Pinniped (mask/intubation)	1997-2001, 2002, 2021, 2023	2

**4. Relevant Training, Certificates, or Licenses**

SCUBA Level 3 – CMAS      1988

**5. Relevant Reports, Publications, or Presentations**

Oral presentations EAAM Conference

- 2006
- 2008
- 2009



# Qualifications Form for Public Display

## 1. Contact Information

**Name** Tania Monreal Pawlowsky

**Title:** Veterinarian DVM

**Affiliation:** International Zoo Veterinary Group ( IZVG )

**Business e-mail address:** T.Monreal@izvg.co.uk

**Business phone number:** +34 670 474 885

## 2. Table 1. Relevant Education

Degree	Major/Field of Study	Institution and Location	Year Received
German High School Degree (Abitur) and Spanish High School Degree (Bachillerat o Unificado Polivalente - Curso de Orientación Universitaria)		German School "San Alberto Magno", Barcelona, Spain	1992
Degree in Veterinary Medicine (DVM)		Faculty of Veterinary Science;"Universitat Autònoma de Barcelona", Barcelona (Spain)	February of the academic year 1997-98

## 3. Relevant Experience

### A. Table 2. Relevant Professional History

Job Title	Role	Affiliation	Location (City, State, Country)	Dates (MM/YY-MM/YY)
Veterinarian	<i>Veterinarian</i>	Aspro-Ocio Group	Various locations in Spain	2000-2002
Veterinarian	<i>Head Veterinarian</i>	Aspro-Ocio Group	Various locations in Spain	2002-2006

Veterinarian	Head Veterinarian and Marine mammal Curator	Aspro-Ocio Group	Various locations in Spain	2006
Veterinarian	Technical Director	Aspro-Ocio Group	Various locations in Spain	2006-2009
Veterinarian	Marine Collection Curator	Barcelona Zoo	Barcelona , Spain	2009-2013
Veterinarian / Company partner IZVG	Full time Veterinarian	Consultancies Worldwide	IZVG, UK	2010-today

## B. Summary of Experience

Table 3. Summary of Experience.

Procedures	Experience Metrics: Estimated Number of Animals, Hours/Months/Years, Species, and Age Class	Most Recent Year Performed	Level of Experience
Road transport	2 Dolphins ( <i>Tursiops truncatus</i> ) juveniles 10 hours	2002	Level 3
Road transport	1 Dolphin ( <i>Tursiops truncatus</i> ) adult 10 hours	2004	Level 4
Road transport	7 Dolphins ( <i>Tursiops truncatus</i> ) adults 10 hours	2005	Level 4
Road transport	7 Dolphins ( <i>Tursiops truncatus</i> ) adults 10 hours	2007	Level 4
Road transport + ferry boat	3 Dolphins ( <i>Tursiops truncatus</i> ) juveniles 15 hours	2007	Level 4
Road transport + ferry boat	2 Dolphins ( <i>Tursiops truncatus</i> ) adults 15 hours	2007	Level 4
Road transport	1 Dolphin ( <i>Tursiops truncatus</i> ) adult 15 hours	2015	Level 4
Air transport + road transport	2 Dolphins ( <i>Tursiops truncatus</i> ) juveniles 6 hours	2016	Level 4
Air transport + road transport	4 Dolphins ( <i>Tursiops truncatus</i> ) adult 10 hours	2016	Level 4
Air transport + road transport + ferry boat	2 Belugas ( <i>Delphinapterus leucas</i> ) adults 40 hours	2019	Level 4
Air transport + road transport	3 Dolphins ( <i>Tursiops truncatus</i> ) 1 juvenile, 2 adults 8 hours	2019	Level 4
Air transport + road transport	1 Dolphin ( <i>Tursiops truncatus</i> ) adult 5 hours	2020	Level 4
Air transport + road transport	3 Dolphins ( <i>Tursiops truncatus</i> ) 1 juvenile, 2 adults 9 hours	2020	Level 4
Road and ferry transport	2 Belugas ( <i>Delphinapterus leucas</i> ) adults 2 hours	2020	Level 4
Road and ferry transport	2 Belugas ( <i>Delphinapterus leucas</i> ) adults 2 hours	2020	Level 4
Air transport + road transport	3 Dolphins ( <i>Tursiops truncatus</i> ) adults 5 hours	2021	Level 4

Air transport + road transport	2 Dolphins ( <i>Tursiops truncatus</i> ) adults 5 hours	2021	Level 4
Air transport + road transport	2 Dolphins ( <i>Tursiops truncatus</i> ) adults 12 hours	2021	Level 4
Road and ferry transport	2 Belugas ( <i>Delphinapterus leucas</i> ) adults 2 hours	2023	Level 4
Road and ferry transport	2 Belugas ( <i>Delphinapterus leucas</i> ) adults 2 hours	2023	Level 4

#### 4. Relevant Training, Certificates, or Licenses

Licensed to practice in Spain, Balearic Island, Belgium, Netherlands, UK, Germany, Iceland, Malta, anywhere within the E.U.

#### 5. Relevant Reports, Publications, or Presentations

##### List of Publications

- Baumgartner, K.; Hüttner, T.; Clegg, I.L.K.; Hartmann, M.G.; Garcia-Párraga, D.; Manteca, X.; Mercera, B.; Monreal-Pawlowsky, T.; Pilenga, C.; Ternes, K.; et al. Dolphin-WET—Development of a Welfare Evaluation Tool for Bottlenose Dolphins (*Tursiops truncatus*) under Human Care. *Animals* 2024, 14, 701. <https://doi.org/10.3390/ani14050701>
- Nemec A, Gracis M, Monreal-Pawlowsky T, Magnone W, Pritelli A and Bell C (2024) Clinical, radiographic and histological findings of seven teeth from two California sea lions (*Zalophus californianus*) housed under professional care. *Front. Vet. Sci.* 11:1335960. doi: 10.3389/fvets.2024.1335960
- Tidière M et al. 2023 Survival improvements of marine mammals in zoological institutions mirror historical advances in human longevity. *Proc. R. Soc. B* 290: 20231895. <https://doi.org/10.1098/rspb.2023.1895>
- Monreal-Pawlowsky, T., Vaicekauskaitė, R., Palencia Membrive, G., Delfour, F., & Manteca, X. (2021). Goal-oriented behavioural and environmental enrichment in aquarium species. *Journal of Zoo and Aquarium Research*, 9(4), 273–280. <https://doi.org/10.19227/jzar.v9i4.588>
- Delfour, F.; Vaicekauskaite, R.; García-Párraga, D.; Pilenga, C.; Serres, A.; Brasseur, I.; Pascaud, A.; Perlado-Campos, E.; SánchezContreras, G.J.; Baumgartner, K.; Monreal-Pawlowsky, T. Behavioural Diversity Study in Bottlenose Dolphin (*Tursiops truncatus*) Groups and Its Implications for Welfare Assessments. *Animals* 2021, 11, 1715. <https://doi.org/10.3390/ani11061715>
- Delfour, F.; Monreal-Pawlowsky, T.; Vaicekauskaite, R.; Pilenga, C.; Garcia-Parraga, D.; Rödel, H.G.; García Caro, N.; Perlado Campos, E.; Mercera, B. Dolphin Welfare Assessment under Professional Care: ‘Willingness to Participate’, an Indicator Significantly Associated with Six Potential ‘Alerting Factors’. *J. Zool. Bot. Gard.* 2020, 1, 42-60.
- S.M. Thornton, T. Monreal-Pawlowsky, M.F. Stidworthy & K.L. Bellamy (2018). Scuticociliate Management Philosophy in Public Aquaria. *Fish Veterinary Journal* (2018) (16) 14 - 27
- Monreal-Pawlowsky, T., Marco-Cabedo V, Sanjosé J., Palencia Membrive G., Fuentes O., Jiménez E., Manteca X. (2017). Environmental enrichment facilitates release and survival of an injured loggerhead sea turtle (*Caretta caretta*) after ten years in captivity. *Journal of Zoo and Aquarium research* DOI10.19227/jzar.v5i4.303
- Monreal-Pawlowsky, T., Marco-Cabedo V, Sanjosé J., Palencia Membrive G., Fresno L., Martorell J. (2017). Pneumocoelom related to physiotherapy in a loggerhead sea turtle (*Caretta caretta*) with fore flipper paralysis. *The Aquatic Veterinarian*, Volume 11-1.
- Monreal-Pawlowsky T, Fernández-Bellon H and Puigdemont A (2017). Suspected Allergic Reaction in Bottlenose Dolphins (*Tursiops truncatus*). *Journal of Veterinary Science & Animal Husbandry* Volume 5 | Issue 1
- Monreal-Pawlowsky, T., Carbajal, A., Tallo-Parra, O., Sabés-Alsina, M., Monclús, L., Almunia, J., ... & Lopez-

- Bejar, M. (2017). Daily salivary cortisol levels in response to stress factors in captive common bottlenose dolphins (*Tursiops truncatus*): a potential welfare indicator. *Veterinary Record*, vetrec-2016.
- Monreal-Pawlowsky, T., Thornton, S. M., Stidworthy, M. F., & Hale, P. (2016). Coeliotomy under general anaesthesia and removal of an enterolith from a sand tiger shark (*Carcharias taurus*). *Veterinary Record Case Reports*, 4(2), e000357.
  - Pawlowsky-Glahn, V., Monreal-Pawlowsky, T., & Egozcue, J. J. (2016). Representation of Species Composition. In *Compositional Data Analysis: CoDaWork*, L'Escala, Spain, June 2015 6 (pp. 167-180). Springer International Publishing.
  - Alonso-Farré, J. M., Gonzalo-Orden, M., Barreiro-Vázquez, J. D., Barreiro-Lois, A., André, M., Morell, M., Llarena-Reino, T. Monreal-Pawlowsky & Degollada, E. (2015). Cross-sectional Anatomy, Computed Tomography and Magnetic Resonance Imaging of the Head of Common Dolphin (*Delphinus delphis*) and Striped Dolphin (*Stenella coeruleoalba*). *Anatomia, histologia, embryologia*, 44(1), 13-21.
  - Alonso-Farré, J. M., Gonzalo-Orden, M., Llarena-Reino, M., Monreal-Pawlowsky, T., & Degollada, E. (2013). Transitional cell carcinoma in the urinary bladder of a common dolphin (*Delphinus delphis*) with emphasis on imaging diagnosis. *Imaging*, 6(1).

#### **List of Conference Name, Location, Year, & Presentations**

- European Association for Aquatic Mammals, Valencia, Spain 2023  
Poster: Vaicekauskaite, R.; Monreal-Pawlowsky, T.; Delfour, F.; Jonas Livet, J.; De Luca, A.; Fountoulaki, M.V.; Olvera-Maneu, S.; Carbajal, A.; Lopez-Bejar, M. "Analysis of cortisol in bottlenose dolphins' gastric fluid in view of monitoring animal welfare under human care."
- EAZA Welfare Forum, Apenheul Primate Park, Netherlands 2022  
Baumgartner K., Delfour F., Hüttner T., Garcia Hartmann M., Monreal-Pawlowsky T., GarciaPárraga D., Manteca X., Tallo-Parra O., Pilenga C., Ternes K., Mercera B., Simon R. and von Fersen L. Vaicekauskaite R. "DolphinWET (Welfare Evaluation Tool): a protocol for the evaluation of Bottlenose dolphins (*Tursiops truncatus*) welfare."
- International Association for Aquatic Animal Medicine (virtual 2022)  
Poster: Monreal-Pawlowsky T., Vaicekauskaite R., Sánchez-Contreras G.J., De Luca A., Olvera-Maneu S., Lopez-Bejar M. "First findings of changes in the gastric fluid of Bottlenose dolphins (*Tursiops truncatus*) as a potential welfare indicator"
- European Association for Aquatic Mammals (virtual 2022)  
Vaicekauskaite R., Monreal-Pawlowsky T., Olvera-Maneu S., De Luca A., Fountoulaki V.M., Lopez- Bejar M. "Gastric fluid as a potential welfare indicator for Bottlenose dolphin (*Tursiops truncatus*)"
- International Marine Animals Trainers Association, Chicago, USA 2022  
Vaicekauskaite R., De Luca A., Fountoulaki V.M., Livet J. and Monreal-Pawlowsky T. "May association between individual dolphins, their personality and their attitude tell us something about their welfare?"
- ABMA Conference (Virtual 2021)  
Ruta Vaicekauskaite 1\*, Jonas Livet2, Tania Monreal-Pawlowsky3 , Fabienne Delfour4 Environmental enrichment induces positive changes in Black Sea bottlenose dolphins' attitude and increases their willingness to participate during public presentations
- Meeting of the European Association for Aquatic Mammals virtual conference 2021  
Monreal-Pawlowsky T., Vaicekauskaite R., Pilenga C., Garcia-Parraga D., Rödel H.G., García Caro N., Perlado Campos E., Mercera B., Delfour F. Dolphin Welfare Assessment under Professional Care: 'Willingness to Participate', an Indicator Significantly Associated with Six Potential 'Alerting Factors'
- International Conference on Environmental Enrichment, Tokyo, Japan, June 2019.  
Ruta Vaicekauskaite, Jonas Livet, Tania Monreal-Pawlowsky, Fabienne Delfour. Environmental enrichment as a tool towards positive changes of Black Sea bottlenose dolphins' attitude and participations during

educational presentations. ICEE Proceedings

- Meeting of the European Association of Aquatic Mammals, Genoa, Italy, March 2017  
Álvarez I. \*, Martín Y., Clegg I., López-Béjar M., Monreal Pawlowsky T., Almunia J. Multi facility study to determine a salivary cortisol baseline in *Tursiops truncatus*. EAAM Proceedings
- Meeting of the European Association for Aquatic Mammals. Benidorm, Spain, March 2016  
Barros-García, C., García-Párraga, D., Marco-Cabedo, V., Valls, M., Álvaro, T., MonrealPawlowsky, T., Saviano, P., Milo, C., Sánchez-Calabuig, M.J., García-Vázquez, F.A. Intravaginal artificial insemination in Bottlenose Dolphins (*Tursiops truncatus*) using refrigerated semen and medical training. EAAM Proceedings, page 26.
- Meeting of the European Association for Aquatic Mammals. Tenerife, Spain , March 2014  
Monreal-Pawlowsky, T., Puigdemont, A., Alcázar R., Gallardet M., Garcia N., González, R., López E., Martin M., Sanz, A., Viedma, M., Fernández. H. Poster: Possible allergic reaction in *Tursiops truncatus*: a case report. EAAM Proceedings 2014
- Meeting of the European Association for Aquatic Mammals. Barcelona, Spain , March 2011  
Alcázar R., Gallardet M., Garcia N., López E., Martin M., Monreal T., Moore, S. Sanz, A. Poster: Transition from a milk-feeding to a fish-feeding diet with minimal impact on a social group of California sea lions.

## **JAMES A. POWELL, Ph.D.**

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### **Education**

1998. Ph.D. University of Cambridge. Cambridge, England. Degree: Zoology. Dissertation: Role of Forest Elephants as Seed Dispersal Agents in a Cameroonian Rain Forest.
- 1983 M.M.A. University of Washington. Institute for Marine Studies, Seattle, Washington. Degree: Marine Affairs and Resource Management. Thesis: Analysis of agreements, treaties, conventions and U.S. laws pertaining to the management of living marine resources with respect to their biological objectives.
- 1978 B.Sc. University of Florida. Department of Forest Resources and Conservation, Gainesville, Fl. Degree: Wildlife Biology.

### **Employment**

- 2018-present Chief Zoological Officer, Clearwater Marine Aquarium (CMA); Executive Director, CMA Research Institute. Oversee all animal health, care, rescue and rehabilitation of animals and habitats at CMA. Develop, conduct and manage marine research, conservation and education programs to provide technical advice, expand conservation initiatives and produce scientific information to improve protection of marine species and habitats in the US and internationally. Integrate science and education to increase public awareness and understanding by all age groups about marine biology and the need for conserving marine species and habitats.
- 2014-2019 Program Manager, Mote Marine Laboratory. Manage sea turtle research and conservation program. Focus on developing and strengthening research component. Administer operations, create budgets, supervise staff and liaise with federal, state and local agencies and the public.
- 2008-2019 Founder and Executive Director, Sea to Shore Alliance. Develop and manage a non-profit research and conservation organization. Programs focus on research activities that provide information to wildlife managers and policy makers. The organization's goal is to strengthening conservation actions based on the best scientific information available.

- 2001-2008 Vice President, National and Aquatic Programs, Wildlife Trust. Developed and coordinated national and international research and conservation programs focusing on sentinel aquatic species, estuaries, and capacity building. Strengthened international initiatives through professional development of nationals involved with aquatic research and conservation.
- 2003-2015 Owner/President, Skyway Solution, Inc. An aviation services company that provides aircraft, pilots and scientists for research surveys, radio tracking, mapping and environmental educational purposes.
- 1998-2001 Research Administrator II, Endangered and Threatened Species Section, Florida Wildlife Research Institute. Administered and coordinated research program on marine mammals and sea turtles for the Florida Fish & Wildlife Conservation Commission. Implemented research activities for the State with overall supervision of 52 staff and five field stations. Provided data used for decision and policy decisions particularly for endangered and threatened aquatic species such as manatees, right whales and green sea turtles. Coordinated State's research program with other Florida agencies, other state agencies and federal agencies such as the US Marine Mammal Commission, National Atmospheric and Oceanic Administration, US Fish Wildlife Service, US Geological Survey, Corps of Engineers, US Coast Guard and US Navy.
- 1994-1998 Director, Glovers Reef Marine Research Station, Belize, Wildlife Conservation Society. Supervised and coordinated research activities Glovers Reef marine research station located on Middle Cay, Glovers Reef, Belize. Oversaw management and logistical operations of the station. Advised and assisted the Government of Belize on matters pertaining to coastal and marine resource conservation. Supervised and conducted direct research on the biology of West Indian manatees in Belize using radio and satellite telemetry. Conducted other studies on the biology of West African manatees in Ghana, Ivory Coast, Cameroon and Gabon.
- 1994 - 1989 Country Coordinator, Cameroon; Director, Cameroon Biodiversity Project. U.S. Agency for International Development and The Wildlife Conservation Society. Coordinated research activities in Korup Rain Forest National Park, Banyang-Mbo Community Reserve and other areas of Cameroon. Research activities included assessment of biological diversity and ecological role of forest elephants. Established permanent research station and study site to be used for long-term studies of forest ecology and training of national scientists and students in rain forest conservation and dynamics, developed a community extension and outreach program to reduce over-exploitation of park resources by providing realistic alternatives and participatory conservation initiatives, e.g. community based wildlife management and eco-tourism.
- 1990 - 1990 Resource Specialist Consultant, International Union for the Conservation of Natural Resources. Conducted studies on the status and biology of manatees in the Senegal

River, Senegal and the Bijagos Archipelago, Guinea Bissau and provide recommendations for conservation to the governments of Senegal and Guinea Bissau.

- 1989 - 1989 Resource Specialist Consultant, Development Alternatives, Incorporated. Conducted impact study of the effects on manatees and wetland resources of a proposed coastal road in Ivory Coast. Made recommendations (later implemented by African Development Bank), for the establishment of marine coastal reserves as mitigation actions and follow-up studies.
- 1989 - 1986 Research Fellow, Wildlife Conservation International (now Wildlife Conservation Society), a division of New York Zoological Society. Conducted three year study on the biology and conservation of the West African manatee and identification and conservation of wetland areas in Ivory Coast.
- 1986 - 1986 Resource Specialist Consultant, Nigerian Conservation Foundation. Conducted study on the status and distribution of manatees in eastern Nigeria.
- 1983 - 1986 Research Assistant, Institute for Marine Studies, University of Washington. Conducted a policy analysis of biological objectives in national and international laws pertaining to the management of living marine resources. The work provided the basis for an international workshop on the biological objectives of living marine resources.
- 1983-1984 Consultant, U.S. Agency for International Development. Led impact study on African manatees of a proposed dam on the Gambia River.
- 1974 - 1983 Biological Technician (research), Denver Wildlife Research Center, U.S. Fish & Wildlife Service. Research and development of management programs for the manatee in the Caribbean, South and Central America, and the United States.
- 1973 - 1974 Research Assistant, World Wildlife Fund - U.S. Research on the status and distribution of manatees in the southeastern United States.
- 1971 - 1972 Scientific Advisor, Undersea World of Jacques Cousteau. Filming of documentary on manatees in Florida.
- 1970 - 1971 Marine Biological Technician, Florida Department of Natural Resources. Conducted impact study on the effects of a nuclear power generating plant at Crystal River, Fl. on local coastal and marine resources.

### **Special Awards and Appointments**

2022-present Director, Friends of Chasshowitzka National Wildlife Refuge



- 2020-present Florida Red Tide Mitigation and Technology Development Initiative, Initiative Technology Advisory Council member.
- 2014-2017 Atlantic Large Whale Take Reduction Team. National Atmospheric and Oceanographic Administration. Stakeholder advisory group to NOAA.
- 2014-present Chair, Atlantic Scientific Review Group, National Atmospheric and Oceanographic Administration. Scientific advisory group to NOAA.
- 2005 Special Recognition, USFWS & USGS, Sirenian Conservation, International Symposium
- 2001-2008 Co-Chair, Sirenia Specialist Group, International Union of the Conservation of Nature and Natural Resources, Species Survival Commission
- 2000 Pew Fellowship Award in Marine Conservation
- 2000 Florida Manatee Recovery Team, US Fish & Wildlife Service
- 2000 Florida Marine Research Institute, Leadership Award
- 1999 Manatee Population Status Working Group, Member
- 1997-present Belize Manatee Working Group, Technical Advisor
- 1989 International Union of the Conservation of Nature and Natural Resources, Species Survival Commission. Member: Elephant Specialist Group, Crocodile Specialist Group .
- 1973 The President of the United States (Richard Nixon). Personal letter of recognition for manatee conservation efforts in the U.S.

## **Skills and Qualifications**

Airplane pilot license, single engine, light aircraft; Unmanned Aircraft System commercial pilot license.

USCG Ocean operator captain's license (expired) 100 ton, Savannah, Ga to Mobile Bay, Ala.

YMCA, SCUBA certification, U.S. Government certified diver.

## **Languages**

French , read and general conversation

Spanish, read.

## Publication List

### Professional Journals, Chapters and Articles

- Campbell, Howard W., and J. A. Powell. 1976. Endangered Species: The Florida Manatee. *Fl. Nat.*, 49:15-20.
- Powell, J. A. 1978. Evidence of carnivory in manatees (*Trichechus manatus*). *J. Mamm.*, 59:442.
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- Powell, J.A. 1984. Observations of commensal cleaning by bluegill (*Lepomis macrochirus*), a centrarchid. *Copeia*. 4:996-998.
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- Powell, J. A. 1988. Analysis of agreements, treaties, conventions and U.S. laws pertaining to the management of living marine resources with respect to their biological objectives. In: W.S. Wooster, Ed. *Fishery Management and Science: Objectives and Constraints*. Springer - Verlag.

- Lefebvre, Lynn and J.A. Powell. 1990. Effects of grazing by manatees on seagrasses in Hobe Sound, Florida. U.S. Marine Mammal Commission. NTIS 46 pp.
- Powell, J.A. 1994. Korup National Park: Report on research and conservation activities of the Cameroon Biodiversity Project. Wildlife Conservation Society. Occasional Paper. 123 pp.
- Rathbun, G.B., J.P. Reid, R.K. Bonde and J.A. Powell. 1995. Reproduction in free-ranging Florida manatees. Pages: 135-156 in T.J. O'Shea, B.B. Ackerman, and H.F. Percival, editors. Population biology of the Florida manatee. National Biological Service Information and Technology Report 1.
- Powell, J.A. 1998. The ecology of forest elephants (*Loxodonta africana cyclotis* Matschie 1900) in Banyang-Mbo and Korup forests, Cameroon with particular reference to their role as seed dispersal agents. Ph.D. Dissertation. University of Cambridge, Cambridge, England. 334 pp.
- Jefferson, T.A., B. E. Curry, S. Leatherwood and J.A. Powell. 1997. Dolphins and porpoises of West Africa: A review of records (Cetacea: Delphinidae, Phocoenidae). *Mammalia*, 61(22): 87-108.
- Lefebvre, L.L., J.P. Reid, W. J. Kenworthy & J.A. Powell. 2000. Characterizing manatee habitat use and seagrass grazing in Florida and Puerto Rico: implications for conservation and management. *Pacific Conservation Biology*. 5: 289-298.
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- O'Shea, T.J. and J.A. Powell. 2001. Marine Mammals: Sirenians. In: J. Steele, S. Thorpe and K. Turekian (eds), *Encyclopedia of Ocean Sciences*. Academic Press Ltd. London, UK.
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- protected area, Isla de la Juventud, Cuba. *Oryx*, 51(2), 324-331. doi:10.1017/S0030605315001143.
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- Castelblanco-Martínez, Nataly & Slone, Daniel & Yauri, Sarah & Ramos, Eric & Alvarez Aleman, Anmari & Attademo, Fernanda & Beck, Cathy & Bonde, Robert & Butler, Susan & Cabrias Contreras, Lesly & Caicedo-Herrera, D. & Galves, Jamal & Gómez-Camelo, I. & Gonzalez-Socoloske, Daniel & Jiménez-Domínguez, D. & Luna, F. & Mona-Sanabria, Y. & Morales-Vela, Benjamín & Olivera-Gomez, Leon & Mignucci-Giannoni, Antonio. 2021. Analysis of body condition indices reveals different ecotypes of the Antillean manatee. *Scientific Reports*. 11. 10.1038/s41598-021-98890-0.
- Alvarez Aleman, Anmari & Hunter, Margaret & Frazer, Thomas & Powell, James & Alfonso, Eddy & Austin, James. 2022. The first assessment of the genetic diversity and structure of the endangered West Indian manatee in Cuba. *Genetica*. 150. 10.1007/s10709-022-00172-8.
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# Qualifications Form for Public Display

## 1. Contact Information

**Name:** Kelly A. Martin

**Title:** Vice President of Zoological Care

**Affiliation:** Clearwater Marine Aquarium

**Business e-mail address:** Kmartin@cmaquarium.org

**Business phone number:** (727) 441 – 1790 x 2255

## 2. Table 1. Relevant Education

Degree	Major/Field of Study	Institution and Location	Year Received
AS	Biology	North Idaho Junior College	1997

## 3. Relevant Experience

### A. Table 2. Relevant Professional History

Job Title	Role	Affiliation	Location (City, State, Country)	Dates (MM/YY- MM/YY)
Vice President of Zoological Care	Oversight of Aquatic Biology, Dive, Animal Care Specialists, Rescue Departments	Clearwater Marine Aquarium	Clearwater, Florida, USA	03/2021 - Current
Director of Animal Care	Oversight of Aquatic Biology, Dive, Animal Care Specialists, Rescue, and Sea Turtle Conservation Program	Clearwater Marine Aquarium	Clearwater, Florida, USA	07/2015 – 03/2021
Director of Marine Mammal Operations	Oversight of Marine Mammal Program	Clearwater Marine Aquarium	Clearwater, Florida, USA	05/2014-07/2015
Manager of Marine Mammals	Managed Marine Mammal Program	Clearwater Marine Aquarium	Clearwater, Florida, USA	03/2011-05/2014

Director of Marine Mammal Operations	Oversight of Animal Care Specialist Program	Dolphin Cay Atlantis Paradise Island	Paradise Island, Bahamas	11/2008-02/20 11
Marine Mammal Specialist I	Marine Mammal Specialist	Dolphin Cay Atlantis Paradise Island	Paradise Island, Bahamas	11/2006-11/20 08
Senior Dolphin Trainer	Dolphin Trainer	Discovery Cove	Orlando, Florida, USA	05/2001-11/20 06
Dolphin Trainer Intern	Intern	Mirage	Las Vegas, Nevada	05/2000-05/20 01



## B. Summary of Experience

Table 3. Summary of Experience.

Procedures	Experience Metrics: Estimated Number of Animals, Hours/Months/Years, Species, and Age Class	Most Recent Year Performed	Level of Experience
Measure and Weigh	Over the course of 24 years, conducted regular weights and measurements (floor scale and hanging weight) on approximately 75 sub-adult and adult <i>Tursiops truncatus</i> , 3 <i>Steno bredanensis</i> , 8 <i>Stenella clymene</i> , 1 <i>Stenella longirostris</i> , 1 <i>Feresa attenuata</i> , and 2 <i>Globicephala macrorhynchus</i>	2024	Current level 4
Observation, Behavior, Monitoring	Throughout 24 years conducted behavioral and medical observations for approximately 75 <i>Tursiops truncatus</i> , 3 <i>Steno bredanensis</i> , 8 <i>Stenella clymene</i> , 1 <i>Stenella longirostris</i> , 1 <i>Feresa attenuata</i> , 2 <i>Globicephala macrorhynchus</i> , and 4 <i>Zalophus californicus</i>	2023	Current level 4
Restrain	Restrained through the use of hand and net on juvenile, sub-adult, and adult for approximately 75 <i>Tursiops truncatus</i> , 2 <i>Steno bredanensis</i> , 8 <i>Stenella clymene</i> , 1 <i>Stenella longirostris</i> , 1 <i>Feresa attenuata</i> , 2 <i>Globicephala macrorhynchus</i> , and 1 <i>Zalophus Californicus</i> across 24 years	2024	Current level 4
Transport	Successful planning and transport of 1 <i>Tursiops truncatus</i> (air/ground) – Level 4	2023	Current level 4
	Successful planning and transport of 5 <i>Tursiops truncatus</i> , 3 <i>Steno bredanensis</i> , 7 <i>Stenella clymene</i> , 1 <i>Stenella longirostris</i> , 2 <i>Globicephala macrorhynchus</i> (ground) – Level 4	2011-2023	Level 4
	Trained for air/ground transport by Jim Horton – Director of Husbandry, Dolphin Cay Atlantis for 6 <i>Tursiops truncatus</i> – Level 1	2007	Level 1
	Ground transport of 3 <i>Tursiops truncatus</i> – Level 2	2001-2005	Level 2
Collect Samples (blood, stomach, urine, fecal, exhaled air)	Over the course of 24 years, I have collected biological samples on sub-adult and adult for approximately 75 <i>Tursiops truncatus</i> , 2 <i>Steno bredanensis</i> , 8 <i>Stenella clymene</i> , 1 <i>Stenella longirostris</i> , 1 <i>Feresa attenuata</i> , and 2 <i>Globicephala macrorhynchus</i>	2014	Current level 4

## 4. Relevant Training, Certificates, or Licenses

- Open Water Diver
  - PADI
  - Certification Date: 1998

**5. Relevant Reports, Publications, or Presentations**

N/A