

## DANA MARIE ROQUE, MD

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**CURRENT APPOINTMENT** Assistant Professor, Division of Gynecologic Oncology, Department of Obstetrics, Gynecology & Reproductive Sciences, University of Maryland School of Medicine, 22 S. Greene St, RM S3AX31, Baltimore, MD 21201

**TERM** 08/25/2014-present

### ACADEMIC APPOINTMENTS

07/2011-06/2014 Fellow, Division of Gynecologic Oncology, Department of Obstetrics, Gynecology & Reproductive Sciences, Yale University School of Medicine, New Haven, CT

06/2007-06/2011 Resident, Department of Obstetrics, Gynecology, and Reproductive Sciences, Magee Womens Hospital-University of Pittsburgh Medical Center, Pittsburgh, PA

### EDUCATION

08/2002-05/2007 M.D. University of North Carolina at Chapel Hill, Chapel Hill, NC  
08/1998-05/2002 B.S. Duke University, Durham, NC; major: chemistry; *Cum Laude* graduate; *Graduation with Distinction*, Department of Chemistry

### BOARD CERTIFICATION

2016 Obstetrics / Gynecology  
2017 Gynecologic Oncology

### OTHER CERTIFICATION

2016 Centers for Excellence in Minimally Invasive Gynecology  
2010 Fundamental of Laparoscopic Surgery

### PROFESSIONAL AFFILIATIONS

2012-present International Gynecologic Cancer Society  
2011-present Society of Gynecologic Oncology  
2011-present American Society of Clinical Oncology  
2011-present American Association of Gynecologic Laparoscopists  
2005-present American Congress of Obstetricians and Gynecologists  
2005-present American Association for Cancer Research

### PUBLICATIONS

#### Peer-Reviewed Manuscripts

1. **Roque DM**, Ratner E, Silasi DA, Azodi M, Rutherford TJ, Schwartz PE, Nelson W, Santin AD. Weekly ixabepilone with or without biweekly bevacizumab in the treatment of recurrent or persistent uterine and ovarian/primary peritoneal/fallopian tube cancers: A retrospective review. *Gynecologic Oncology* 2015; 137(3):392-400.
2. English DP, Bellone S, Schwab CL, **Roque DM**, Lopez S, Bortolomai I, Cocco E, Bonazzoli E, Chatterjee S, Ratner E, Silasi DA, Schwartz PE, Rutherford TJ, Santin AD. Solitomab, an EpCAM/CD3 bispecific antibody (BiTE), is highly active against primary chemotherapy resistant ovarian cancer cell lines in vitro and fresh tumor cells ex vivo. *Cancer* 2014; doi: 10.1002/cncr.29062.
3. Schwab CL, Bellone S, English DP, **Roque DM**, Lopez S, Cocco E, Nicoletti R, Bortolomai I, Bonazzoli, Ratner E, Silasi DA, Azodi M, Schwartz PE, Rutherford TJ, Santin AD. Afatinib demonstrates remarkable activity against

- HER2 amplified uterine serous endometrial cancer in vitro and in vivo. *British Journal of Cancer* 2014; 111(9):1750-6.
4. Schwab CL, M.D, English DP, **Roque DM**, Bellone S, Lopez S, Cocco E, Nicoletti R; Rutherford TJ, Schwartz PE, Santin AD. Neratinib shows efficacy in the treatment of HER2/neu amplified uterine serous carcinoma in vitro and in vivo. *Gynecologic Oncology* 2014 doi: 10.1016/j.ygyno.2014.08.006.
  5. **Roque DM**, Buza N, Glasgow M, Bellone S, Bortolomai I, Gasparrini S, Cocco E, Ratner E, Silasi D, Azodi M, Rutherford TJ, Schwartz PE, Santin AD. Class III  $\beta$ -tubulin overexpression within the tumor microenvironment is a prognostic biomarker for poor overall survival in ovarian cancer patients treated with neoadjuvant carboplatin/paclitaxel. *Clinical & Experimental Metastases* 2014; 31(1): 101-10.
  6. English DP, **Roque DM**, Carrara L, Lopez S, Bellone S, Cocco E, Bortolomai I, Schwartz PE, Rutherford TJ, Santin AD. HER2/neu gene amplification determines the sensitivity of uterine serous carcinoma cell lines to AZD8055, a novel dual mTORC1/2 inhibitor. *Gynecologic Oncology* 2013; 131(3):753-8.
  7. **Roque DM**, Bellone S, Buza N, Romani C, Cocco E, Bignotti E, Ravaggi A, Rutherford TJ, Schwartz PE, Pecorelli S, Santin AD. Tubulin- $\beta$ -III overexpression in ovarian clear cell and serous carcinoma as a marker for poor overall survival after platinum/taxane chemotherapy and sensitivity to patupilone. *American Journal of Obstetrics & Gynecology* 2013; 209(1): 62.e1-9.
  8. Bignotti E, Tassi RA, Calza S, Ravaggi A, Rossi E, Donzelli C, Todeschini P, Romani C, Bandiera E, Zanotti L, Carnazza M, Quadraro F, Tognon G, Sartori E, Pecorelli S, **Roque DM**, Santin AD. Secretoglobulin expression analysis in epithelial ovarian carcinoma: lipophilin B gene upregulation as an independent marker of better prognosis. *Journal of Translational Medicine* 2013; 11(1): 162.
  9. **Roque DM**, Bellone S, English DP, Buza N, Cocco E, Gasparrini S, Bortolomai I, Ratner E, Silasi D, Azodi M, Rutherford TJ, Schwartz PE, Santin AD. Tubulin- $\beta$ -III overexpression by uterine serous carcinomas is a marker for poor overall survival after platinum/taxane chemotherapy and sensitivity to epothilones. *Cancer* 2013; 119(14): 2582-92.
  10. Zhao S, Choi M, Overton JD, Bellone S, **Roque DM**, Cocco E, Guzzo F, English DP, Varughese J, Gasparrini S, Bortolomai I, Buza N, Hui P, Abu-Khalaf M, Ravaggi A, Bignotti E, Bandiera E, Romani C, Todeschini P, Tassi R, Zanotti L, Carrara L, Pecorelli S, Silasi DA, Ratner E, Azodi M, Schwartz PE, Rutherford TJ, Stiegler AL, Mane S, Boggon TJ, Schlessinger J, Lifton RP, Santin AD. Landscape of somatic single-nucleotide and copy-number mutations in uterine serous carcinoma. *Proceedings of the National Academy of Science* 2013; 110(8): 2916-21.
  11. Bignotti E, Zanotti L, Calza S, Falchetti M, Lonardi S, Ravaggi A, Romani C, Bandiera E, Tassi RA, Facchetti F, Sartori E, Pecorelli S, **Roque DM**, Santin AD. Trop-2 protein overexpression is an independent prognostic marker for disease recurrence in endometrioid endometrial carcinoma. *BMC Clinical Pathology* 2012 12(1): 22-30.
  12. Bellone S, **Roque DM**, Cocco E, Gasparrini S, Bortolomai I, Buza N, Abu-Kalaf M, Silasi D, Ratner E, Azodi M, Schwartz PE, Rutherford TJ, Pecorelli S, Santin AD. Down-regulation of membrane complement inhibitors CD55 and CD59 by siRNA sensitizes uterine serous carcinoma overexpressing Her2/Neu to complement and antibody-dependent cell cytotoxicity *in vitro*: implications for trastuzumab-based immunotherapy. *British Journal of Cancer* 2011; 106(9): 1543-50.
  13. Carrara L, Guzzo F, **Roque DM**, Bellone S, Cocco E, Sartori E, Pecorelli S, Schwartz PE, Rutherford TJ, Santin AD. Differential *in vitro* sensitivity to patupilone versus paclitaxel in uterine and ovarian carcinosarcoma cell lines is linked to tubulin-beta-III expression. *Gynecologic Oncology* 2011; 125(1): 231-6.
  14. **Roque DM**, Wang SA, Wasley A, Jacques-Carroll L, Roush S, Weinbaum CM on behalf of the CDC. Assessing completeness of perinatal hepatitis B virus infection reporting through comparison of immunization program and surveillance data — United States. *Morbidity and Mortality Weekly Report* 2011; 60(3): 410-3.
  15. **Roque DM**. Perinatal ethics. *Virtual Mentor: American Medical Association Journal of Ethics* 2007; 9: 597-659. Available at <http://virtualmentor.ama-assn.org/2007/09/toc-0709.html>.

#### Case Reports, Technical Notes, Letters

1. **Roque DM**, Santin AD. Uterine cancer, mutational phenotype, and the era of immune checkpoint blockade. *Expert Review Clinical Immunology* 2016 [editorial]. PMID: 27905822. Available at <http://dx.doi.org/10.1080/1744666X.2017.1266938>.
2. **Roque DM**, Santin AD. Oncofertility in gynecologic oncology: an oxymoron? *Future Oncology* 2016; 12(14):1683-6.
3. Kapoor K, Evans MC, Shkullaku M, Schillinger R, White CR, **Roque DM**. Biventricular metastatic invasion from cervical squamous cell carcinoma. *BMJ Case Reports* 2016; doi: 10.1136/bcr-2016-214931.

4. Black J, **Roque DM**, Pasternac MC, Buza N, Rutherford TJ, McCarthy S, Ratner E. A series of malignant ovarian cancers arising from within a mature cystic teratoma: a single institution experience. *International Journal of Gynecologic Cancer* 2015 25(5):792-7.
5. Dick-Biascoechea M, **Roque DM**, Schwartz PE. Appearances can be deceiving: ovarian mass presents as vaginal prolapse. *American Journal of Obstetrics and Gynecology* 2014; 211(3):310.e1-2.
6. **Roque DM**, Azodi M. Editorial forward. *Robotic Surgery: Research and Reviews* 2014; 1: 11-12.
7. **Roque DM**, Jones D, Carter G, Kelley JL. Primary giant cell malignant fibrous histiocytoma of the ovary: case report and review of the literature. *Gynecologic Oncology* 2010; 119(2): 397-8.

#### Reviews, Chapters, Books

1. Lynam S, Young L, Morozov V, Rao G, **Roque DM**. Risk, risk reduction, and management of occult malignancy diagnosed after uterine morcellation: a commentary. *Womens' Health (Lond Engl)* 2015; 11(6): doi 10.2217/WHE.15.63.
2. Black J, **Roque DM**, Gold L, Santin AD. Future directions and new targets in endometrial cancer. In *Current Clinical Oncology*, Springer International Publishing, c.2015.
3. Miller D, **Roque DM**, Santin AD. The use of Monsels' solution to treat obstetrical haemorrhage: a review and comparison to other topical hemostatic agents. *American Journal of Obstetrics & Gynecology* 2015; 212(6):725-35.
4. English DP, **Roque DM**, Buza N, Santin AD. HER2 as a biomarker for endometrial cancer. In *Biomarkers in Disease: Methods, Discoveries and Applications*, Victor R. Preedy & Vinood B. Patel, eds., c.2015.
5. Schwab CL, English DP, **Roque DM**, Pasternak M, Santin AD. The past, present, and future role of immunotherapy in ovarian cancer. *Immunotherapy* 2014;6(12):1279-93.
6. Black J, English DP, **Roque DM**, Santin AD. Targeted therapy in uterine serous carcinoma, an aggressive variant of endometrial cancer. *Women's Health* 2014; 10(1):45-57.
7. Buza N, **Roque DM**, Hui P, Santin AD. Her2/Neu in endometrial cancer: a promising therapeutic target and diagnostic challenge. *Archives of Pathology and Laboratory Medicine* 2014; 138(3):343-50.doi: 10.5858/arpa.2012-0416-RA.
8. Schwab CL, English DP, **Roque DM**, Santin AD. Taxanes: impact on gynecologic malignancies. *Anti-Cancer Drugs* 2014; 25(5):522-35.
9. **Roque DM**, Santin AD, Schwartz PE. Multidisciplinary management of serous carcinoma of the endometrium. In *Current Multidisciplinary Oncology: Gynecologic Cancers*, Kunle Odunsi and Tanja Pejovic, eds, 1<sup>st</sup> edition. NY: Demos Medical, © 2013, ISBN: 978-1936287895.
10. English DP, **Roque DM**, Santin AD. HER2 expression beyond breast cancer: therapeutic implications for gynecologic malignancies. *Molecular Diagnosis and Therapy* 2013; 17(2): 85-99.
11. English DP, **Roque DM**, Santin AD. Class III  $\beta$ -tubulin overexpression in gynecologic tumors: implications for the choice of microtubule targeted agents? *Expert Reviews of Anticancer Therapy* 2013; 13(1): 63-74.
12. **Roque DM**, Santin AD. Updates in therapy for uterine serous carcinoma. *Current Opinion in Obstetrics & Gynecology* 2013; 25(1): 29-37.
13. **Roque DM**, Schwartz PE, Santin AD. Targeted therapy for high-risk endometrial cancer. *Clinical Practice* 2012; 9(5): 539-54.
14. **Roque DM**, Santin AD. Antigen-specific immunotherapy for ovarian cancer. In *Advances in Ovarian Cancer Management*, Peter Schwartz, ed. ISBN (epub) 978-1-78084-081-9, © 2012.
15. **Roque DM**, Sherman F. Review: 'Heart Disease in Pregnancy.' *Journal of Pediatric and Adolescent Gynecology* 2008; 21(5): 301-2. [doi:10.1016/j.jpog.2007.12.006](https://doi.org/10.1016/j.jpog.2007.12.006).
16. Annunziata C, **Roque DM**, Azad N, Kohn EC. Chapter 5: Application of serum and tissue proteomics to understand and detect solid tumors. In *Cancer Proteomics: From Bench to Bedside*, Sayed S. Daoud, ed. Totowa, NJ: Humana Press, ©2008, pp 101-120.

#### ABSTRACTS / PRESENTATIONS

##### Oral Presentations

1. Alessandro Santin, Amanda Nickles-Fader, Eric Siegel, Natalia Buza, Pi Hui, Osama Abdelghany, Dan-Arin Silasi, Setsuko Chambers, Angeles Secord, Laura Havrilesky, David O'Malley, Nicole Nevadunsky, Babak Edraki, Dirk Pikaart, William Lowery, Karim El-Sahwi, **Dana M. Roque**, Peter E. Schwartz. Phase II trial of carboplatin-paclitaxel compared to carboplatin-paclitaxel-trastuzumab in advanced (stage III-IV) or recurrent uterine serous carcinoma: results of interim analysis (NCT1367002). International Gynecologic Cancer Society, 16<sup>th</sup> Biennial Meeting, Lisbon, Portugal, October 29-31, 2016.
2. Amy Harper, Teklu Legesse, Jocelyn Reader, Gautam G. Rao, Paul Staats, Amy Fulton, **Dana M. Roque**. EP4 receptor and class III  $\beta$ -tubulin expression in uterine smooth muscle tumors: implications for prognosis and treatment. International Gynecologic Cancer Society, 16<sup>th</sup> Biennial Meeting, Lisbon, Portugal, October 29-31, 2016.
3. Elizabeth Nichols, Soren Bentzen, Irene Daniels, Gautam Rao, **Dana M. Roque**, Nader Hanna, Pranshu Mohindra. National cancer database analysis of uterine carcinosarcoma: improvement in survival with the use of radiation therapy.
  - i. — American Society for Radiation Oncology, 58<sup>th</sup> Annual Meeting, Boston, MA, Sept 25-28, 2016.
  - ii. — Best of ASTRO Meeting, Ft. Lauderdale, FL, November 11-12, 2016.
4. **Dana M. Roque**, Carlton L. Schwab, Diana P. English, Elena S. Ratner, Dan-Arin Silasi, Masoud Azodi, Thomas Rutherford, Peter E. Schwartz. Weekly ixabepilone with or without concurrent bevacizumab in the treatment of platinum/taxane-resistant endometrial and ovarian cancers: an institutional experience. Society for Gynecologic Investigation, 61st Annual Scientific Meeting, Florence, Italy, March 26-29, 2014.
5. **Dana M. Roque**, Elena S. Ratner, Dan-Arin Silasi, Masoud Azodi, Thomas J. Rutherford, Peter E. Schwartz, Alessandro D. Santin. Weekly ixabepilone with or without concurrent bevacizumab in the treatment of platinum/taxane-resistant endometrial and ovarian cancers: an institutional experience. New England Association of Gynecologic Oncologists, 33<sup>rd</sup> Annual Meeting, Westbrook, CT, June 14-16, 2013.
6. **Dana M. Roque**, Stefania Bellone, Natalia Buza, Emiliano Cocco, Sara Gasparrini, Thomas J. Rutherford, Peter E. Schwartz, Alessandro D. Santin. Increased tubulin- $\beta$ -III expression in serous cancers following paclitaxel administration: implications for mechanisms of recurrent disease. Opening Plenary, International Gynecologic Cancer Society, 14th Biennial Meeting, Vancouver, BC, October 13-16, 2012. Available at <http://webcasting.kenes.com/IGCS2012/>.
7. **Dana M. Roque**, Stefania Bellone, Natalia Buza, Emiliano Cocco, Sara Gasparrini, Thomas J. Rutherford, Peter E. Schwartz, Alessandro D. Santin. Tubulin- $\beta$ -III overexpression by uterine serous papillary carcinomas is a marker for poor overall survival, paclitaxel resistance, and sensitivity to epothilones. International Gynecologic Cancer Society, 14th Biennial Meeting, Vancouver, BC, October 13-16, 2012.
8. **Dana M. Roque**, Stefania Bellone, Natalia Buza, Emiliano Cocco, Sara Gasparinni, Elena Ratner, Dan-Arin Silasi, Masoud Azodi, Thomas J. Rutherford, Peter E. Schwartz, Alessandro D. Santin. Tubulin- $\beta$ -III overexpression is a marker of sensitivity to epothilones in ovarian clear cell carcinoma. New England Association of Gynecologic Oncologists, 32<sup>nd</sup> Annual Meeting. Bar Harbor, ME, June 6-8, 2012.
9. **Dana M. Roque**, Stefania Bellone, Natalia Buza, Emiliano Cocco, Sara Gasparinni, Eliana Bignotti, Antonella Ravaggi, Elena Ratner, Dan-Arin Silasi, Masoud Azodi, Thomas J. Rutherford, Peter E. Schwartz, Sergio Pecorelli, Alessandro D. Santin. Tubulin- $\beta$ -III overexpression is a marker of sensitivity to epothilones in ovarian clear cell carcinoma. New England Association of Gynecologic Oncologists, 32<sup>nd</sup> Annual Meeting. Bar Harbor, ME, June 6-8, 2012.
10. **Dana M. Roque**, Gina M. Mantia-Smaldone, Diana Lenzner, Kristin K. Zorn, Paniti Sukumvanich, Joseph L. Kelley, Robert P. Edwards. Correlation of biomarker responses with surgical outcome and survival following neoadjuvant chemotherapy for advanced ovarian and primary peritoneal cancers. 2010 Annual Research Day in Reproductive Biology and Women's Health, Magee Womens Hospital, University of Pittsburgh Medical Center, Pittsburgh, PA, June 4, 2010.
11. **Dana M. Roque**, Gina M. Mantia-Smaldone, Diana Lenzner, Robert P. Edwards. Prognostic variables for patients receiving neoadjuvant chemotherapy for advanced ovarian and peritoneal cancers. Mid-Atlantic Gynecologic Oncology Society, 24<sup>th</sup> Annual Meeting, Hot Springs, VA, October 9-10, 2009.
12. **Dana M. Roque**, Sandra W. Roush, Lisa Jacques-Carroll, Annemarie Wasley, Susan Wang. Evaluation of perinatal hepatitis B virus (pHBV) infections reported to the National Notifiable Disease Surveillance System (NNDSS) for infants born in 2005. National Immunization Conference, 42<sup>nd</sup> Annual Meeting, Atlanta, GA, March 20, 2008. Available at <http://cdc.confex.com/cdc/nic2008/webprogram/Paper15581.html>.

**Poster Presentations**

1. **Dana M. Roque**, Danielle Meir-Levi, Gautam G. Rao, Paul N. Staats, Amy M. Fulton, Jocelyn Reader. EP4 receptor antagonism in paclitaxel-resistant ovarian clear cell carcinomas that overexpress class III  $\beta$ -tubulin. American Association for Cancer Research, Annual Meeting, Washington, DC, April 1-5, 2017 (accepted).
2. Amy Harper, Justin Cohen, **Dana M. Roque**, Gautam G. Rao, Pranshu Mohindra, Elizabeth Nichols. Barriers to timely completion of radiation therapy in patients with cervical cancer in an urban tertiary care center. International Gynecologic Cancer Society, 16<sup>th</sup> Biennial Meeting, Lisbon, Portugal, October 29-31, 2016.
3. Rachel Schillinger, Nicole D'Emic, Elizabeth Nichols, Pranshu Mohindra, Melinda Pectasides, Gautam G. Rao, **Dana M. Roque**. Re-irradiation of locally recurrent gynecologic cancers: a single-institution experience. International Gynecologic Cancer Society, 16th Biennial Meeting, Lisbon, Portugal, October 29-31, 2016.
4. Pranshu Mohindra, Soren Bentzen, Daniele Scartoni, Irene Giacomelli, Gautam Rao, **Dana M. Roque**, Nader Hanna, Elizabeth Nichols. Adjuvant whole pelvic radiation therapy for endometrioid adenocarcinoma: 45 Gy or 50/50.4 G? American Society for Radiation Oncology, 58<sup>th</sup> Annual Meeting, Boston, MA, Sept 25-28, 2016.
5. Pranshu Mohindra, Soren Bentzen, Daniele Scartoni, Irene Giacomelli, **Dana M. Roque**, Gautam Rao, Nader Hanna, Elizabeth Nichols. Adjuvant therapy for locoregionally advanced endometrioid adenocarcinoma: upfront chemotherapy or upfront radiotherapy? American Society for Radiation Oncology, 58<sup>th</sup> Annual Meeting, Boston, MA, Sept 25-28, 2016.
6. Jocelyn Reader, Paul Staats, Olga Goloubeva, **Dana M. Roque**, Maya Matheny, Amy M. Fulton, Gautam G. Rao. Functional studies of the prostaglandin E2 receptor EP4 in ovarian cancer. American Association for Cancer Research 107<sup>th</sup> Annual Meeting, New Orleans, LA, April 16-20, 2016.
7. Aparna Ramaseshan, Jessica Felton, **Dana M. Roque**, Gautam Rao, Tatiana Sances. Pelvic floor disorders in women with gynecologic malignancies: a systematic review. American Urogynecologic Society, 36th Annual Scientific Meeting, Seattle, WA, Oct 13-17, 2015.
8. **Dana M. Roque**, Carlton L. Schwab, Olga Goloubeva, Diana P. English, Jonathan D. Black, Dan-Arin Silasi, Masoud Azodi, Thomas J. Rutherford, Alessandro D. Santin, Peter E. Schwartz, Elena S. Ratner. Choice of adjuvant chemotherapy following neoadjuvant carboplatin / paclitaxel and interval debulking. Society of Gynecologic Oncology, 46<sup>th</sup> Annual Meeting March 28-31, 2015.
9. Carlton L. Schwab, Diana P. English, Jonathan D. Black, Salvatore Lopez, Stefania Bellone, **Dana M. Roque**, Elena S. Ratner, Dan-Arin Silasi, Masoud Azodi, Thomas J. Rutherford, Peter E. Schwartz, Alessandro D. Santin. Neratinib, an irreversible ErbB receptor tyrosine kinase inhibitor, shows efficacy in the treatment of HER2 amplified carcinosarcoma in vitro and in vivo. Society of Gynecologic Oncology 46<sup>th</sup> Annual Meeting, Chicago, IL, March 28-31, 2015.
10. Jonathan D. Black, Salvatore Lopez, Stefania Bellone, Carlton L. Schwab, Diana P. English, **Dana M. Roque**, Dan-Arin Silasi, Elena S. Ratner, Masoud Azodi, Thomas J. Rutherford, Peter E. Schwartz, Alessandro D. Santin. Mutations in the PIK3 pathway as a major determinant of trastuzumab resistance in uterine serous carcinoma. Society of Gynecologic Oncology 46<sup>th</sup> Annual Meeting, Chicago, IL, March 28-31, 2015.
11. **Dana M. Roque**, Joyce Varughese, Diana P. English, Gregory M. Gressel, Lisbet Lundsberg, Elena S. Ratner, Thomas J. Rutherford, Peter E. Schwartz. Treatment of uterine carcinosarcoma with cisplatin/ifosfamide, paclitaxel/ifosfamide, or carboplatin/paclitaxel. Society for Gynecologic Investigation, 61st Annual Scientific Meeting, Florence, Italy, March 26-29, 2014.
12. Jonathon D. Black, **Dana M. Roque**, Thomas J. Rutherford, Peter E. Schwartz, Elena S. Ratner. Malignant degeneration of mature cystic teratomas. Society for Gynecologic Investigation, 61st Annual Scientific Meeting, Florence, Italy, March 26-29, 2014.
13. Carlton L. Schwab, **Dana M. Roque**, Diana P. English, Stefania Bellone, Elena S. Ratner, Dan-Arin Silasi, Masoud Azodi, Peter E. Schwartz, Thomas J. Rutherford, Alessandro D. Santin. Afatinib, an irreversible ErbB family blocker, demonstrates remarkable activity against HER2 amplified uterine serous endometrial cancer in vitro and in vivo. Society for Gynecologic Investigation, 61st Annual Scientific Meeting, Florence, Italy, March 26-29, 2014.
14. **Dana M. Roque**, Carlton L. Schwab, Diana P. English, Elena S. Ratner, Dan-Arin Silasi, Masoud Azodi, Thomas J. Rutherford, Peter E. Schwartz, Alessandro Santin. Weekly ixabepilone with or without concurrent bevacizumab in the treatment of platinum/taxane-resistant endometrial and ovarian cancers: an institutional experience. Society of Gynecologic Oncology, 45<sup>th</sup> Annual Meeting, Tampa, FL, March 22-25, 2014.
15. Diana P. English, Carlton L. Schwab, **Dana M. Roque**, Stefania Bellone, Elena S. Ratner, Dan-Arin Silasi, Masoud Azodi, Peter E. Schwartz, Thomas J. Rutherford. Solitomab, an EpCAM/CD3 bispecific antibody (BiTE), is highly active against primary chemotherapy-resistant ovarian cancer cell lines and fresh tumor ex vivo. Society of Gynecologic Oncology, 45<sup>th</sup> Annual Meeting, Tampa, FL, March 22-25, 2014.

16. **Dana M. Roque**, Natalia Buza, Michelle Glasgow, Elena Ratner, Dan-Arin Silasi, Masoud Azodi, Thomas J. Rutherford, Peter E. Schwartz, Alessandro D. Santin. Class III  $\beta$ -tubulin overexpression within the tumor microenvironment is a prognostic biomarker for poor overall survival in ovarian cancer patients treated with neoadjuvant carboplatin/paclitaxel. Society of Gynecologic Oncology, 44<sup>th</sup> Annual Meeting, Los Angeles, CA, March 9-13, 2013.
17. **Dana M. Roque**, Stefania Bellone, Chiara Romani, Natalia Buza, Emiliano Cocco, Sara Gasparrini, Eliana Bignotti, Antonella Ravaggi, Thomas J. Rutherford, Peter E. Schwartz, Sergio Pecorelli, Alessandro D. Santin. Tubulin- $\beta$ -III overexpression is a marker of sensitivity to epothilones in ovarian clear cell carcinoma. International Gynecologic Cancer Society, 14th Biennial Meeting, Vancouver, BC, October 13-16, 2012.
18. Emiliano Cocco, Stefania Bellone, **Dana M. Roque**, Federica Guzzo, Sara Gasparrini, Sergio Pecorelli, Dan-Arin Silasi, Masoud Azodi, Elena Ratner, Thomas Rutherford, Peter Schwartz, Caroline E. Weller, W. Mark Saltzman, and Alessandro D. Santin. *In vivo* targeting of CD44+ ovarian cancer stem cells (CSC) by Clostridium Perfringens Enterotoxin binding domain (CPE-peptide) conjugated to poly(lactic-co-glycolic acid) (PLGA) nanoparticles (NP). American Association for Cancer Research, 103<sup>rd</sup> Annual Meeting, Chicago, IL, March 31-April 4, 2012. *Cancer Res* 2012;72(8 Suppl): abstract 364.
19. **Dana M. Roque**, Stefania Bellone, Marta Betti, Dan Arin-Silasi, Elena Ratner, Masoud Azodi, Peter E. Schwartz, Thomas J. Rutherford, Sergio Pecorelli, Alessandro D. Santin. Mammaglobin B (SCGB2A-1)-specific CD8+ cytotoxic T lymphocytes are highly effective in killing autologous chemotherapy-resistant ovarian cancer cells: implications for SCGB2A-1 dendritic cell-based therapeutic vaccines. Society of Gynecologic Oncology, 43<sup>rd</sup> Annual Meeting, Austin, TX, March 24-27, 2012.
20. **Dana M. Roque**, Luisa Carrara, Federica Guzzo, Stefania Bellone, Emiliano Cocco, Enrico Sartori, Sergio Pecorelli, Peter E. Schwartz, Thomas J. Rutherford, Alessandro D. Santin. Differential *in vitro* sensitivity to paclitaxel versus paclitaxel in uterine and ovarian carcinosarcoma cell lines is linked to tubulin  $\beta$ -III expression. Society of Gynecologic Oncology, 43<sup>rd</sup> Annual Meeting, Austin, TX, March 24-27, 2012.
21. **Dana M. Roque**, Julia M. Thaller, Anda Vlad, Robert P. Edwards. Loco-regional immunity in patients undergoing intraperitoneal chemotherapy for advanced primary or recurrent epithelial ovarian cancers.
  - i. —Translational Research Cancer Consortium, 14th Annual Meeting, Seven Springs, PA, February 24-26, 2011.
  - ii. —American Association for Cancer Research, 102nd Annual Meeting, Orlando, FL, April 2-6, 2011 (accepted but not presented).
22. **Dana M. Roque**, Bunja Rungruang, Julia Thaller, Anda Vlad, Gina M. Mantia-Smaldone, Hanna Goldman, Tianjiao Chu, Kristin K. Zorn, Robert P. Edwards. Intraperitoneal catheter aspirates can be used to monitor tumor microenvironment biomarkers. Society of Gynecologic Oncology, 41<sup>st</sup> Annual Meeting, San Francisco, CA, March 14-17, 2010.
23. **Dana M. Roque**, Gina M. Mantia-Smaldone, Diana Lenzner, Kristin K. Zorn, Paniti Sukumvanich, Joseph L. Kelley, Robert P. Edwards. Biomarker and radiologic responses do not predict optimal interval debulking following neoadjuvant chemotherapy for advanced ovarian and primary peritoneal cancers. Society of Gynecologic Oncology, 41<sup>st</sup> Annual Meeting, San Francisco, CA, March 14-17, 2010.
24. **Dana M. Roque**, Mary Winters, Joy Aquino, Satoshi Nishizuka, Elise C. Kohn. Analysis of reverse-phase protein microarrays in clinical trials: a comparison of protein quantification using linear regression, logistic regression, and dose interpolation models.
  - i. —American Association for Cancer Research, 97<sup>th</sup> Annual Meeting, Washington, DC, April 1-5, 2006.
  - ii. —American Medical Student Association, 56<sup>th</sup> Annual Convention, Chicago, IL, March 29-April 2, 2006.
  - iii. —Thirty-eighth Annual Student Research Day, University of North Carolina at Chapel Hill School of Medicine, January 25, 2006.
25. **Dana M. Roque**, Victoria Virador, Elise C. Kohn. Characterization of BAG-3 (bcl2-associated athanogene) cleavage products.
  - i. —Post-baccalaureate Research Festival, National Institutes of Health, Bethesda, MD, May 24, 2006.
  - ii. —National Cancer Institute Center for Cancer Research 6<sup>th</sup> Annual Fellows and Young Investigators Retreat, Ocean City, MD, February 28-March 2, 2006.
26. Victoria M. Virador, **Dana M. Roque**, Jareer Kassis, Elise C. Kohn. Differential BAG-3 binding and behavior of hsp70 and hsp27 by breast cancer cells. 8<sup>th</sup> Biennial Meeting on Molecular Chaperones and the Heat-Shock Response at Cold Spring Harbor Laboratory, Cold Spring Harbor, NY, May 3-7, 2006.

27. **Dana M. Roque**, Gerald Hsu, Lorena S. Beese. Structural Studies of Telomerase. Howard Hughes Forum at Duke University, Durham, NC, April 2002.

**OTHER**

1. **Dana M. Roque**, Elena Ratner, Dan-Arin Silasi, Masoud Azodi, Peter E. Schwartz, Thomas J. Rutherford, Alessandro D. Santin. Weekly ixabepilone with or without concurrent bevacizumab in the treatment of recurrent endometrial cancer. *J Clin Oncol* 30, 2012 (suppl; abstr e15526) [publication only].

**GRANTS**

2016-7 **Tubulin Isotype and Microtentacle Composition in Progression of Ovarian Clear Cell Carcinoma**  
**D01 Award, Department of Obstetrics, Gynecology, and Reproductive Sciences, University of Maryland Medical Center, Baltimore, MD**

Awardees: Dana M. Roque, MD, Division of Gynecologic Oncology; Jocelyn Reader, PhD, Division of Gynecologic Oncology  
Collaborator: Stuart Martin, PhD, Department of Physiology  
Description: \$50,000 over one year

2015-6 **Intuitive Surgical Research Simulator Loan Program: Multi-Specialty Robotic Simulator Research Program at University of Maryland School of Medicine, Baltimore, MD**

Awardees: Tatiana Sances, MD, Division of Urogynecology; Dana M. Roque, MD, Division of Gynecologic Oncology; Vadim Morozov, Program Director Center of Excellence in Minimally Invasive Surgery; Patricia Seal, MD, Department of Obstetrics & Gynecology; Minhaj Siddiqui, MD, Department of Urology; Shamus Carr, MD, Division of Thoracic Surgery; Jeff McDaniels, CRNFA, University of Maryland School of Medicine

Description: Support for original research using virtual reality simulation in training and development of da Vinci technical skills, with provision of a da Vinci® Si Surgeon Console and da Vinci Si Skills Simulator. Loan was conferred on a competitive basis by submission of a research grant application; 5 of 50 applications were awarded nationally.

**RESEARCH FELLOWSHIPS**

2005-6 **Laboratory of Pathology, Center for Cancer Research, National Cancer Institute, National Institutes of Health, Bethesda, MD**

Preceptor: Elise Kohn, MD, Senior Investigator, Molecular Signaling Section

Funding: Cancer Research Training Award, National Institutes of Health

Description: (1) Assisted in the collection/preservation of patient plasma and core needle biopsy specimens obtained by ultra-sound/computed tomography guidance for analysis by laser capture microdissection

and reverse-phase protein microarray profiling in a phase I trial of bevacizumab (Avastin)/BAY 43-9006 (Sorafenib) (2) Conducted a comparison of various algorithms (dilution point, linear regression, logistic regression, dose interpolation models) employed in the analysis of reverse-phase protein microarrays for use within clinical trials (3) Characterized BAG-3 (bcl2-associated athanogene) protein degradation by immunoprecipitation and mass spectroscopy to describe the mechanism by which upregulation of BAG-family proteins in a variety of human cancers may confer resistance to apoptotic stimuli (4) Assisted in the study of differential binding patterns of BAG-3 with heat shock proteins (hsp/hsc 70 and 27) in MDA-435 breast cancer cells.

## RESEARCH PROTOCOLS

### HP-00074863.

Randomized phase II evaluation of weekly ixabepilone with or without bevacizumab, Site Principal Investigator - not yet recruiting.

### HP-00061901.

Randomized Phase II Evaluation of Carboplatin / Paclitaxel +/- Trastuzumab in HER2/Neu+ Advanced or Recurrent Uterine Papillary Serous Carcinoma, Site Principal Investigator – closed 01/2017.

### HP-00061641.

Collection of Tissue Samples from Women with Gynecologic Malignancies and Healthy Controls for Laboratory Research, Principal Investigator.

### HP-00061673.

Treatment and Survival Outcomes for Patients with Gynecologic Malignancies, Principal Investigator.

### HP-00063498.

Molecular Profiling of Gynecologic Cancers, Principal Investigator.

### HP-00066154.

TERPS (Training, Education, and Robotic Performance with Simulation) at University of Maryland Medical Center, Co-Investigator.

## ADMINISTRATIVE POSITIONS

2017-present

NRG Oncology Rare Tumor Committee

2016-present

Clinical Practice Committee Member, Society of Gynecologic Oncology

## LECTURES & COURSES

2017

Ovarian Cancer. Hematology/Oncology Fellowship Program Lecture Series. University of Maryland School of Medicine, Baltimore, MD. Aril 27, 2017 (scheduled).

2015-present

Case Discussions: endometrial, cervical, ovarian cancers. 3<sup>rd</sup> year medical student clerkship. University of Maryland School of Medicine, Baltimore, MD. June 3, 2015; January 19, 2016; October 18, 2016; November 15, 2016; January 10, 2017.

2016

Chemotherapy for Gynecologic Malignancy: from serendipity to personalized molecular medicine. Grand Rounds, Department of Obstetrics, Gynecology, and Reproductive Sciences, University of Maryland School of Medicine, Baltimore, MD.

2016

The Adnexal Mass. General Surgery Educational Series, University of Maryland School of Medicine.

2015

Uterine Cancer. Medical Oncology Solid Tumor Conference, University of Maryland School of Medicine, Baltimore, MD.

2015

Gynecologic Malignancies. Mini-Medical School Program, University of Maryland School of Medicine, Baltimore, MD.

2015

Class III  $\beta$ -Tubulin: Insights into Paclitaxel Resistance and Sensitivity to Epothilones in Gynecologic Malignancies. Hematology/Oncology Grand Rounds, University of Maryland School of Medicine, Baltimore, MD.

2010

Special Problems in the Use of Blood Products in Obstetrics and Gynecology. Grand Rounds, Magee Womens Hospital, University of Pittsburgh Medical Center, Pittsburgh, PA.



- 2002 Rural Healthcare and Community Action. Course Instructor, Duke University, Durham, NC, Fall Term.
- 2002 English Immersion Program Instructor, Huazhong University of Science and Technology, Wuhan, China, Summer Term.

**PROFESSIONAL SERVICE**

- 2017 Testimony for Maryland Senate Committee on SB 918: "Health Insurance Coverage of Fertility Preservation Procedures for Iatrogenic Infertility"
- 2017 Reviewer for *British Journal of Cancer* (ISSN 0007-0920)
- 2016 Reviewer for *Scientific Reports* (ISSN 2045-2322)
- 2016 Reviewer for *Cancer Letters* (ISSN: 1872-7980)
- 2016 Reviewer for *Cancer Chemotherapy and Pharmacology* (ISSN: 0344-5704)
- 2016 Reviewer for *BMC Cancer* (ISSN 1471-2407)
- 2016-present Resident Mock Oral Exams, Department of OB/GYN & Reproductive Sciences, University of Maryland Medical School
- 2015-6 Residency Interviewer, Department of OB/GYN & Reproductive Sciences, University of Maryland Medical School
- 2015 Reviewer for *Pharmaceuticals* (ISSN 1424-8247)
- 2015 Reviewer for *Immunotherapy* (ISSN 1750-743X; 1750-7448)
- 2015 Reviewer for *BMC Womens Health* (ISSN 1472-6874)
- 2015 Reviewer for *BMC Cancer* (ISSN 1471-2407)
- 2014 Reviewer for *BMC Cancer* (ISSN 1471-2407)
- 2014 Reviewer for *Cancer* (ISSN 1097-0142)
- 2010 Reviewer for *Women's Health* (ISSN 1745-5057)

**PROFESSIONAL HONORS & RECOGNITION**

**National**

- 2007 Editor, American Medical Association Journal of Ethics, "The Parental-Fetal Disconnect" September 2007, Available at <http://journalofethics.ama-assn.org/site/archives1.html>