

Varykina G. Thackray, Ph.D.

University of California, San Diego
Department of Obstetrics, Gynecology and Reproductive Sciences
3A17 Leichtag Biomedical Research Building, Mail Code: 0674
9500 Gilman Drive, La Jolla, CA 92093
Email: vthackray@ucsd.edu
Website: <http://repro.ucsd.edu/thackray>

EDUCATION

- 1987-1991 B.A. in Biology
Middlebury College
- 1996-2002 Ph.D. in Molecular Biology
University of Colorado Health Sciences Center

RESEARCH AND PROFESSIONAL EXPERIENCE

- 1992-1993 Research Technician
Department of Veterinary Pathology
Cornell University
- 1993-1996 Research Associate
Ribozyme Pharmaceuticals, Inc., Boulder, CO
- 1996-2002 Ph.D. Graduate Student in Molecular Biology
University of Colorado Health Sciences Center
Advisor: Steven K. Nordeen, Ph.D.
- 2002-2008 Postdoctoral Fellow in Reproductive Endocrinology
University of California, San Diego
Advisor: Pamela L. Mellon, Ph.D.
- 2008-2014 Assistant Professor Adjunct/In Residence
Department of Obstetrics, Gynecology and Reproductive Sciences
University of California, San Diego
- 2014-2020 Associate Professor In Residence
Department of Obstetrics, Gynecology and Reproductive Sciences
University of California, San Diego
- July 2018 Visiting Scientist
Department of Microbiome Science, Director Dr. Ruth Ley
Max Planck Institute for Developmental Biology, Tübingen, Germany

2019-present Co-Director
IRACDA Post-doctoral Training Program
University of California, San Diego

2020-present Professor In Residence
Department of Obstetrics, Gynecology and Reproductive Sciences
University of California, San Diego

AWARDS AND HONORS

1988-1990 Middlebury College Dean's List and College Scholar
2000 Victor and Earleen Bolie Graduate Scholarship Fund
2001 David and Lucille Packard Fellow of the Keystone Symposia
2000-2001 UCHSC Student Research Forum Outstanding Research Award
2009 Women in Endocrinology Young Investigator Award
2012 Endocrine Society Early Investigators Award
2017 Association for Women in Science San Diego Achievement in Outreach Award
2018 Association for Women in Science San Diego Leadership Service Award

GRANTS AND FUNDING

Current

2019-2024 NIH R01 HD095412 The Role of the Gut Microbiome in Polycystic Ovary Syndrome (PI) \$2, 310,553 (total award)
2016-2022 NIH Center for Reproductive Science and Medicine at UCSD P50 HD012303
Co-Investigator on Project I – Role of FSH in Female Infertility
(PI, Pamela L. Mellon) \$2,043,062 (total award)
2019-2021 NIH Center for Reproductive Science and Medicine at UCSD Pilot Award
Co-Investigator – Mechanisms Underlying Altered Metabolic and Psychosocial Stress Responses in PCOS (PI, Kellie Breen-Church) \$100,000 (total award)
2020-2021 NIH R43 HD103568 SBIR Phase I A Multi-Omic Platform for Polycystic Ovary Syndrome Characterization and Management Co-Investigator (PI, Chris Mason/Onegevity Health) \$100,000 (total award)

Past

1999-2002 U.S. Army Breast Cancer Research Program Predoctoral Fellowship
2002-2003 NIH Training in Reproductive Sciences Training Grant T32 HD007203
2003-2006 NIH NRSA Individual Postdoctoral Fellowship F32 DK065437
2008-2011 NIH Research Scientist Development Award K01 DK080467
2008-2009 UCSD/UCLA Diabetes Research Center P&F Award
2009, 2011 UCSD Academic Senate Health Sciences Research Grants
2009-2016 NIH Center for Reproductive Science and Medicine at UCSD U54 HD012303
Co-Investigator on Project I – Integration of Hormone Signaling in the Pituitary Gonadotrope (Project Leader, Pamela L. Mellon)

2011-2017 NIH R01 HD067448 Transcriptional Control in Pituitary Gonadotrope Cells (PI)
 2013, 2015 UCSD Academic Senate Health Sciences Research Grants
 2013-2015 NIH NRSA Individual Postdoctoral Fellowship F32 HD074414 (Sponsor)
 2016 Frontiers of Innovation Scholars Program for Undergraduate Research (FISP)
 2017-2018 UCSD Academic Senate Health Sciences Bridge Grant
 2017-2018 Ferring Research Institute, Inc., Proof-of-Concept Grant
 2018 Chancellor's Research Excellence Scholarship (CRES)
 2018-2021 NIH NRSA Individual Postdoctoral Fellowship F31 HD096838 (Co-Sponsor)
 2019-2020 UCSD Academic Senate Health Sciences Bridge Grant

TEACHING

Graduate Students and Post-Doctoral Fellows

2012-2013 Lecturer, Statistical Inference (BIOM 285/NEU225), Biomedical Sciences and Neurosciences Graduate Programs, UCSD
 2013-2017 Lecturer, Hormone Action (BIOM 226), Biomedical Sciences Graduate Program, UCSD
 2017 Faculty Participant, UCSD Research Ethics Program Refresher Course for Post-doctoral Fellows
 2018-2020 Lecturer, Molecular and Physiological Neuroendocrinology (BIOM288/NEU222), Biomedical Sciences and Neurosciences Graduate Programs, UCSD

Medical Students and Clinical Fellows

2011-2019 Facilitator, Small Literature Group, Foundations of Human Biology (SOMC 220), UCSD School of Medicine
 2011-2019 Facilitator, Clinical Foundations Problem Based Learning Group (SOMC 236), Endocrinology, Reproduction and Metabolism Block, UCSD School of Medicine
 2016 Lecturer, REI Clinical Fellows Didactic Teaching

MENTORING

Training:

2011-present Faculty Mentor, NIH Postdoctoral Training Program in Reproductive Sciences
 Participant, Weekly Reproductive Endocrinology Meeting (2011-present)
 2012-present Co-Director and Faculty Mentor, UCSD Institutional Research and Academic Career Development Post-doctoral Training Program (IRACDA)
 Reviewer, Mock NIH Study Section (2015-2017, 2019-2020)
 Participant, Ethics Workshop (2017)
 Member, Steering Committee (2017-present)
 Member, Admissions Committee (2017-present)
 Co-Instructor, 6 week NIH Grant Writing Course (2019-2020)
 Participant, Monthly Professional Development Meetings (2019-present)
 Participant, Academic Job Application Workshop (2020)
 2015-present Faculty Mentor, NIH Postdoctoral Training Program in Experimental Endocrinology and Metabolism
 2016-2020 Moderator, UCSD Postdoc EPIC Bootcamp IDP Workshop

2011-present Faculty Mentor, UCSD Biological Sciences Integrated BS/MS Program and Individual Research for Undergraduates (BISP 199)

Post-Doctoral Fellows:

2003-2006 UCSD Post-doctoral Fellow: R. Sasson
2007-2011 UCSD Post-doctoral Fellow: K. Breen-Church
2011-2016 UCSD Post-doctoral Fellow: D. Skarra
2017 UCSD Post-doctoral Fellow: A. Hernandez-Carretero
2020-present UCSD Post-doctoral Fellow: M. Rizk

Graduate Students:

2003-2006 UCSD Biomedical Sciences Ph.D. student: S. McGillivray
2004-2006 UCSD Biology B.S./M.S. student: J. Hunnicutt
2007-2009 UCSD Biology B.S./M.S. student: Y. Ghochani
2016-2019 SDSU/UCSD Joint Doctoral Cell and Molecular Biology Ph.D. student: P. Torres
2016-present UCSD Neuroscience Ph.D. student: S. Bohaczuk
2016-2020 UCSD Biology B.S./M.S. student: Lillian Sau
2017-2019 SDSU Microbiology M.S. student: P. Arroyo
2018-2020 SDSU Biomedical Informatics M.S. student: B. Ho
2019 UCSD Biomedical Sciences Ph.D. rotation student: E. Maissy
2017-present UCSD Biology B.S./M.S. student: Annie Chen
2020-present SDSU/UCSD Joint Doctoral Cell and Molecular Biology Ph.D. student:
L. Sisk-Hackworth
2020-present UCSD Biomedical Sciences student (Zarrinpar lab): E. Maissy

Undergraduate Students and Others:

2003-2004 UCSD BISP 199 undergraduate researcher: B. Mulligan
2006-2007 UCSD BISP 199 undergraduate researcher: A. Memon
2009-2010 UCSD BISP 199 undergraduate researcher: J. Saini
2009-2011 UCSD BISP 199 undergraduate researcher: A. Rhee
2010 SDSU Biology undergraduate researcher: M. Handy
2011-2012 UCSD BISP 199 undergraduate researcher: R. Parikh
2011-2013 UCSD BISP 199 undergraduate researcher: C. Park
2013-2014 UCSD BISP 199 undergraduate researcher: M. Sidhu
2013-2014 UCSD BISP 199 undergraduate researcher: A. Chen
2013 UCSD STARS-MAP summer undergraduate intern: M. Rivera
2014 UCSD STARS-MAP summer undergraduate intern: L. Jackson
2015-2016 UCSD BISP 199 undergraduate researcher: A. Anwar
2015 UCSD BISP 199 undergraduate researcher: J. Chen
2015 Medical Student volunteer researcher: C. Park
2015-2016 UCSD IRACDA SURF summer undergraduate intern and volunteer undergraduate
researcher: I. Roca
2016-2017 UCSD post-bac volunteer researcher: P. Arroyo
2019-present UCSD volunteer undergraduate researcher: R. Shah
2019-present UCSD volunteer undergraduate researcher: A. Panjwani
2020 UCSD Regents Scholar 99H undergraduate researcher: A. Nguyen

2020-present UCSB volunteer undergraduate researcher: C. Tse

Ph.D. Graduate Student Committees:

2013 External Reviewer, McGill University Ph.D. Thesis Defense: S. Tran
2014 Neuroscience Minor Proposition Committee: M. Boisvert
2015 Biomedical Sciences Minor Proposition Committee: S. Newton
2017-present Neuroscience Thesis Committee: S. Bohaczuk
2018-2019 SDSU/UCSD Joint Cell and Molecular Biology Thesis Committee: P. Torres
2018-2020 Biomedical Sciences Thesis Committee: A. Vrbanac
2020-present Neuroscience MSTP Thesis Committee: E. Ho

Junior Faculty:

2011-2019 OB/GYN and Reproductive Sciences Assistant Professor: K. Breen-Church

PROFESSIONAL ACTIVITIES

1999-present Member, Endocrine Society
ENDO Abstracts Reviewer, 2012, 2015, 2017-2020
Research Affairs Core Committee, 2013-2016
Minority Access Program ICE/ENDO Mentor, 2014-2015
ENDO Symposium Chair, 2015
ENDO Oral Abstract Award in Reproductive Science Judge, 2015
ENDO Oral Abstract Award in Women's Health Judge, 2016
ENDO Specific Aims Critique Session Faculty Reviewer, 2017
Endocrine Society Representative, FASEB Publications and
Communications Committee 2019-2022

1999-present Member, Women in Endocrinology
Program Committee, 2007-2009
Communications Committee 2009-2013
Mentoring Committee 2015-2019 (Chair 2017-2019)

2005-present Member, Association for Women in Science, San Diego Chapter
Scholarship Committee, 2006-2016 (Co-Chair 2006-2008)
Outreach Committee, 2016-2020 (Co-Chair 2017-2019)
Board Member-at-Large, 2019-2020
Speaker/Workshop Organizer, WIST conference 2019, 2021
President, 2020-2021

2012-2017 Member, Society for the Study of Reproduction
2013-present Member, Doris A. Howell Foundation for Women's Health Research
Advisory Council

Grant Reviewer

2012, 2014 *Ad hoc* Reviewer, NIH/CSR ICER Study Section
2013 *Ad hoc* Reviewer, NIH/CSR AREA in EMNR Study Section
2016 *Ad hoc* Reviewer, NIH/CSR MCE Study Section

- 2016 *Ad hoc* Reviewer, Israeli Ministry of Health "Alternatives for Animal Use in Biomedical Research" Program
- 2017 *Ad hoc* Reviewer, NIH/CSR Special Emphasis Panel ZRG1 DKUS-H (54)
- 2017 *Ad hoc* Reviewer, New University Researchers Start up Program of Fonds de recherche du Quebec – Nature et technologies
- 2018 *Ad hoc* Reviewer, Diabetes UK Lawrence Fellowship

Journals

- 2002-present *Ad hoc* Reviewer: Andrology, Endocrine-Related Cancer, Endocrine Reviews, Endocrinology, Environmental Health, Genesis, Journal of Assisted Reproduction and Genetics, Fertility and Development, Journal of Biological Chemistry, Journal of the American College of Nutrition, Journal of the Endocrine Society, Journal of Endocrinology, Journal of Molecular Endocrinology, Journal of Clinical Endocrinology and Metabolism, Journal of Neuroendocrinology, JoVE, Microbiome, Molecular and Cellular Endocrinology, Molecular Endocrinology, Pediatric Obesity, PLOS One, Reproduction, Reproductive Biomedicine Online, and Reproductive Sciences
- 2013-2020 Member, Endocrinology Editorial Board

PROFESSIONAL DEVELOPMENT

- 2018 UC San Diego Faculty Mentor Training Program (FMTP)
Completed 8 hours of facilitator-led, in-person training for mentoring delivered by the Center for Improvement of Mentored Experiences in Research and developed mentoring philosophy for mentoring certification
- 2020 Feedback Resilience Workshop
Facilitated by Dr. Sharon Milgram, Director of the Office of Intramural Training & Education at the National Institute of Health (NIH)
- 2020 UC San Diego Chancellor's 21-Day Anti-Racism Challenge
Developed by Dr. Eddie Moore, Jr. to promote deeper understandings of race, power, privilege, supremacy, and oppression with the goal of furthering awareness and understanding of racism, and engagement in anti-racism, with a focus on the experience of Black people in America
- 2021 Building a Respectful and Inclusive Culture (BRIC) Leadership Training Program
Participated in 4.5 hours of facilitator-led, in-person training for leadership delivered by the UC San Diego PACE Program and Health Sciences Office of Faculty Affairs

SERVICE

Department:

- 2009-2012 Member, Reproduction Journal Club Steering Committee

2012-2018 Chair, Reproduction Journal Club Steering Committee
 2014-2016 Department Representative, UCSD Faculty Senate Representative Assembly
 2016-present Member, Departmental Faculty Grant Writing Critique Committee
 2017-2019 Member, Departmental Strategic Planning Initiative Collaboration Committee
 2018-present Chair, Center for Reproductive Science and Medicine Seminar Series Organizing Committee
 2018-present Member, Departmental Faculty Mentoring Program
 2020 Member, Diversity, Inclusion and Equity Group, Department Chair Candidate Interviews

University:

2008-present Member, UCSD Center for Reproductive Science and Medicine
 2008-present Member, UCSD/UCLA Diabetes Research Center
 2016-present Member, UCSD Center for Microbiome Innovation
 2016 Reviewer, UCSD Frontiers of Innovation Scholars Program for Undergraduate Research Review Committee
 2017 Reviewer, UC President's Postdoctoral Fellowship Program
 2017-present Member, UCSD Women in Health Sciences Committee
 2019-present Member, Steering Committee Green New Deal at UCSD Student rganization
 2020-present Member, Center for Perinatal Discovery

Public Outreach:

2010 Workshop Volunteer, "Gummy Bear Genetics", Expanding Your Horizons, USD
 2011-2015 Chair, Science Support Committee and Science Classroom Volunteer, Albert Einstein Academy Charter Elementary School
 2012-2018 Provided laboratory research experience for San Diego high school students hosted by the UCSD Society for Undergraduate Research and Outreach (SURO)
 2013-2017 Organizer and Participant, 1st-5th Annual Family Science Night, Albert Einstein Academy Charter Elementary School
 2014 Science Volunteer, Day of Innovation, Albert Einstein Academy Charter Middle School
 2015-2017 "Metric Liquid Measurements and Brains Activity", 150 students in 6th Grade Science, Albert Einstein Academy Charter Middle School
 2017 Meet a Scientist, "Endocrine Disrupting Chemicals", La Jolla Public Library
 2017, 2018 Workshop Volunteer, "Crime Sleuthing", Expanding Your Horizons, USD
 2017 Research Mentor, Reproductive and Oncofertility Science Academy, UCSD
 2017 Volunteer, "Shaving Cream Art", Maker Faire, Balboa Park, San Diego
 2018 Volunteer, 1st Annual Family STEM Night, Albert Einstein Academy Charter Middle School
 2018 Volunteer, AWIS-SD Oobleck Activity, Expo Day, Petco Park, San Diego
 2018 Career Panel, AWIS-SD Scholar's Celebration, UCSD
 2018, 2019 AWIS-SD Award Judge, Greater San Diego Science and Engineering Fair
 2018 "DNA Sequencing and Analysis Activity", 36 students in 9th Grade Biology, San Diego High School International Studies Program
 2019 Organizer, AWIS-SD Slime Activity, STEM in Your Backyard Barrio Logan
 2020 Organizer and Moderator, AWIS-SD Virtual Panel Discussion,

2020 Adapting to COVID-19: A Women in STEM Perspective
Panelist, Picture a Scientist Post Screening Discussion
UC San Diego Office of Post-doctoral and Research Scholars

PUBLICATIONS (h-index 23; i10-index 34)

#i indicates publication with trainee

1. Beigelman, L., McSwiggen, J., Draper, K., Gonzales, C., Jensen, K., Karpeisky, A., Modak, A., Matulic-Adamic, J., DiRenzo, A., Haeberli, P., Sweedler, D., Tracz, D., Grimm, S., Wincott, F., **Thackray, V.G.**, and Usman, N. (1995) Chemical Modification of Hammerhead Ribozymes: Catalytic Activity and Nuclease Resistance. *Journal of Biological Chemistry* 270:25702-25708
2. **Thackray, V.G.**, Lieberman, B.A. and Nordeen, S.K. (1998) Differential Gene Induction by Glucocorticoid and Progesterone Receptors. *Journal of Steroid Biochemistry and Molecular Biology* 66(4): 171-178
3. Kelley, S.T. and **Thackray, V.G.** (1999) Phylogenetic Analysis Reveals Ancient Duplication of Estrogen Receptor Isoforms. *Journal of Molecular Evolution* 49:609-614
4. Wan, Y., Coxe, K.K., **Thackray, V.G.**, Housley, P.R., and Nordeen, S.K. (2000) Separable Features of the Ligand-Binding Domain Determine the Differential Subcellular Localization and Ligand-Binding Specificity of Glucocorticoid Receptor and Progesterone Receptor. *Molecular Endocrinology* 15(1): 17-31
5. **Thackray, V.G.**, Young, R.H., Hooper, J.E., and Nordeen, S.K. (2000) Estrogen Agonist and Antagonist Action on the Human Estrogen Receptor in *Drosophila*. *Endocrinology* 141(10): 3912-3915
6. **Thackray, V.G.** and Nordeen, S.K. (2002) High Yield Purification of Functional, Full-length Steroid Receptor Coactivator 1 Expressed in Insect Cells. *Biotechniques* 32(2): 260-263
7. **Thackray, V.G.**, Toft, D. and Nordeen, S.K. (2003) Novel Activation Step Required for Transcriptional Competence of Progesterone Receptor on Chromatin Templates. *Molecular Endocrinology* 17(12): 2543-53
8. Spady, T.J., Shayya, R., **Thackray, V.G.**, Ehrensberger, L., Bailey, J., and Mellon, P.L. (2004) Androgen Regulates FSH β Gene Expression in an Activin-Dependent Manner in Immortalized Gonadotropes. *Molecular Endocrinology* 18(4): 925-940
9. Coss, D., **Thackray, V.G.** and Mellon, P.L. (2005) Activin Regulates Luteinizing Hormone β -Subunit Gene Expression through Smad-Binding and Homeobox Elements. *Molecular Endocrinology* 19(10): 2610-23
10. **Thackray, V.G.**, McGillivray, S.M.[#] and Mellon, P.L. (2006) Androgens, Progestins and Glucocorticoids Induce Follicle-Stimulating Hormone β -Subunit Gene Expression at the Level of the Gonadotrope. *Molecular Endocrinology* 20(9): 2062-79

*Featured in The Endocrine Society Endocrine News Journal Highlights

11. McGillivray, S.M.[#], **Thackray, V.G.** and Mellon, P.L. (2007) Activin and Glucocorticoids Synergistically Activate Follicle-Stimulating Hormone β -Subunit Gene Expression in the Immortalized L β T2 Gonadotrope Cell-Line. *Endocrinology* 148(2): 762-773
12. **Thackray, V.G.** and Mellon, P.L. (2008) Synergistic Induction of Follicle-Stimulating Hormone β -Subunit Gene Expression by Gonadal Steroid Hormone Receptors and Smads. *Endocrinology* 149(3): 1091-102
13. Sasson, R.[#], Luu, S.H., **Thackray V.G.**, and Mellon, P.L. (2008) Glucocorticoids Induce Human Glycoprotein Hormone Alpha-Subunit Gene Expression in the Gonadotrope. *Endocrinology* 149(7): 3643-3655
14. **Thackray, V.G.**, Hunnicutt. J.L.[#], Memon, A.K. [#], Ghochani, Y. [#], and Mellon, P.L. (2009) Progesterone Suppresses Basal Expression and GnRH Induction of the Luteinizing Hormone β -Subunit Gene. *Endocrinology* 150(5): 2395-2403
15. **Thackray, V.G.**, Mellon, P.L. and Coss, D. (2010) Hormones in Synergy: Regulation of the Pituitary Gonadotropin Genes. *Molecular and Cellular Endocrinology* 314(2):192-203
16. Breen, K.M.[#], **Thackray, V.G.**, Coss, D., and Mellon, P.L, (2010) Runt-Related Transcription Factors Impair Activin Induction of the Follicle-Stimulating Hormone β -Subunit Gene. *Endocrinology* 151(6):2669-80
17. Coss, D., Mellon, P.L. and **Thackray, V.G.** (2010) A FoxL in the Smad House: Activin Regulation of FSH. *Trends in Endocrinology and Metabolism* 21(9):562-568
18. Ghochani, Y.[#], Saini, J.[#], Mellon, P.L., and **Thackray, V.G.** (2012) FoxL2 Is Involved in the Synergy Between Activin and Progestins on the Follicle-Stimulating Hormone β -Subunit Promoter. *Endocrinology* 153(4):2023-2033
19. Breen, K.M.[#], **Thackray, V.G.**, Hsu, T., Mak-McCully, R., Coss, D., and Mellon, P.L. (2012) Stress Levels of Glucocorticoids Inhibit LH β -Subunit Gene Expression in Gonadotrope Cells. *Molecular Endocrinology* 26(10):1716–1731
20. Arriola, D.J., Mayo, S.L., Skarra, D.V.[#], Benson, C.A., and **Thackray, V.G.** (2012) FOXO1 Transcription Factor Inhibits Luteinizing Hormone β Gene Expression in Pituitary Gonadotrope Cells. *Journal of Biological Chemistry* 287(40):33424-35
21. Benson, C.A., Kurz, T.L. and **Thackray, V.G.** (2013) A Human *FSHB* Promoter SNP Associated with Low FSH Levels in Men Impairs LHX3 Binding and *FSHB* Transcription. *Endocrinology* 154(9):3016–3021

22. Skarra, D.V.[#], Arriola, D.J., Benson, C.A., and **Thackray, V.G.** (2013) Forkhead Box O1 Is a Repressor of Basal and GnRH-Induced *Fshb* Transcription in Gonadotropes. *Molecular Endocrinology* 27(11):1825–1839

*Featured in The Endocrine Society Endocrine News Research Roundup

23. **Thackray, V.G.** (2014) Fox Tales: Regulation of Gonadotropin Gene Expression by Forkhead Transcription Factors. *Molecular and Cellular Endocrinology* 385(1-2):62-70

24. Park, C.H.[#], Skarra, D.V.[#], Rivera, A.J., Arriola, D.J., and **Thackray, V.G.** (2014) Constitutively Active FOXO1 Diminishes Activin Induction of *Fshb* Transcription in Immortalized Gonadotropes. *PLOS One* 9(11):e113839.

25. Skarra, D.V.[#] and **Thackray, V.G.** (2015) FOXO1 Is Regulated by Insulin and IGF1 in Pituitary Gonadotropes. *Molecular and Cellular Endocrinology* 405:14-24.

26. Kauffman, A.S., **Thackray, V.G.**, Ryan, G.E., Tolson, K.P., Glidewell-Kenney, C.A., Semaan, S.J., Poling, M.C., Iwata, N., Breen, K.M., Duleba, A.J., Stener-Victorin, E., Shimasaki, S., Webster, N.J., and Mellon, P.L. (2015) A Novel Letrozole Model Recapitulates Both the Reproductive and Metabolic Phenotypes of Polycystic Ovary Syndrome in Female Mice. *Biology of Reproduction* 93(3):69, 1-12.

27. Kelley, S.T., Skarra, D.V.[#], Rivera, A.J., and **Thackray, V.G.** (2016) The Gut Microbiome Is Altered in a Letrozole-Induced Mouse Model of Polycystic Ovary Syndrome. *PLOS One* 11(1):e0146509.

*Covered online by Science Daily, News-Medical.net, and Diabetes.co.uk.

28. Skarra, D.V.[#], Hernández-Carretero, A.[#], Rivera, A.J., Anvar, A.R.[#], and **Thackray, V.G.** (2017) Hyperandrogenemia Induced by Letrozole Treatment of Pubertal Female Mice Results in Hyperinsulinemia Prior to Weight Gain and Insulin Resistance. *Endocrinology* 158(9):2988–3003.

29. Torres, P.J.[#], Siakowska, M., Banaszewska, B., Pawelczyk, L., Duleba, A.J., Kelley, S.T., and **Thackray, V.G.** (2018) Gut Microbial Diversity in Women with Polycystic Ovary Syndrome Correlates with Hyperandrogenism. *Journal of Clinical Endocrinology and Metabolism* 103(4):1502–1511.

*Covered online by Bustle, Medscape, Healio (Endocrine Today), Endocrine Daily Briefing (Endocrine Society), MedPage Today, EurekAlert (AAAS), Genetic Engineering and Biotechnology News, Science Blog, Newswise, and Medical Xpress

**Highlighted in the Women in Endocrinology 2019 Thematic Issue of the Endocrine Society and interviewed for the *Endocrine News* Postcast

https://academic.oup.com/endocrinesociety/pages/thematic_issue_women_in_endocrinology_2019

30. McDonald, D., Hyde, E., Debelius, J., . . . **Thackray, V.G.**, . . . and Knight, R. (2018) American Gut: an Open Platform for Citizen-Science Microbiome Research. *mSystems* 3 (3), e00031-18.

31. **Thackray, V.G.** (2019) Sex, Microbes and Polycystic Ovary Syndrome. *Trends in Endocrinology and Metabolism* 30(1):54-65.

32. Torres, P.J.[#], Skarra, D.V.[#], Ho, B.S.[#], Sau, L.[#], Anvar, A.R.[#], Kelley, S.T., and **Thackray, V.G.** (2019) Letrozole Treatment of Adult Female Mice Results in a Distinct Metabolic Phenotype and Changes in the Gut Microbiome. *BMC Microbiology* 19(1):57.
33. Torres, P.J.[#], Ho, B.S.[#], Arroyo, P.[#], Sau, L.[#], Chen, A.[#], Kelley, S.T., and **Thackray, V.G.** (2019) Exposure to a Healthy Gut Microbiome Improves Reproductive and Metabolic Phenotypes in a Mouse Model of Polycystic Ovary Syndrome. *Endocrinology* 160(5), 1193-1204.
 *Covered online by Reader's Digest, Science Daily, Healio (Endocrine Today), Endocrine Daily Briefing (Endocrine Society), MedPage Today, News-Medical.net, and Medical Xpress.
 **Interviewed for Lindsey Parsons for her Microbiome Podcast
<https://link.chtbl.com/theperfectstool-guest>
34. de la Cuesta-Zuluaga, J., Kelley, S.T., Chen, Y., Escobar, J.S., Mueller, N.T., Ley, R.E., McDonald, D., Huang, S., Swafford, A., Knight, R., and **Thackray, V.G.** (2019) Age- and Sex-Dependent Patterns of Gut Microbial Diversity in Human Adults. *MSystems* 14;4(4).
 * Covered online by Bustle, Neuroscience News, EurekAlert (AAAS), Science Daily, Medical Xpress, Sci News, Tdnews, Lab Manager Magazine, and Infection Control Today.
35. Arroyo, P.[#], Ho, B.S.[#], Sau, L.[#], Kelley, S.T., and **Thackray, V.G.** (2019) Letrozole Treatment of Pubertal Mice Results in Activational Effects on Reproduction, Metabolism and the Gut Microbiome. *PLOS ONE* 14(9):e0223274.
36. McCosh, R.B., Tian, K., Ho, B.S.[#], **Thackray, V.G.** and Breen, K.M. (2019) Insulin-Induced Hypoglycemia Suppresses Pulsatile LH Secretion and Arcuate Kiss1 Cell Activation in Female Mice *Journal of Neuroendocrinology* 31(12):e12813.
37. Esparza, L.A., Schafer, D., Ho, B.S.[#], **Thackray, V.G.** and Kauffman, A.S. (2020) Hyperactive LH Pulses and Elevated Kisspeptin and NKB Gene Expression in the Arcuate Nucleus of a PCOS Mouse Model. *Endocrinology* 2020 161(4).
38. Bohakzuk, S.[#], **Thackray, V.G.**, Shen, J., Skowronska-Krawczyk, D. and Mellon, P.L. (2021) FSH β Transcription Is Regulated by a Novel 5' Distal Enhancer with a Fertility-Associated Single Nucleotide Polymorphism. *Endocrinology* 162(1):1-20.
39. Sau, L.[#], Olmstead, C.M., Cui, L.J., Chen, A.[#], Shah, R.[#], Kelley, S.T., **Thackray, V.G.** (2021) Alterations in Gut Microbiota Do Not Play a Causal Role in Diet-Independent Weight Gain Caused by Ovariectomy *Journal of the Endocrine Society* 5(1):1-11.
40. Rizk, M.[#] and **Thackray, V.G.** (2021) Intersection of Polycystic Ovary Syndrome with the Gut Microbiome. *Journal of the Endocrine Society* 16 November 2020. Online ahead of print.

INVITED SCIENTIFIC PRESENTATIONS AND SEMINARS

89th Annual Meeting of The Endocrine Society, Toronto, Canada, June 2007

Mechanisms of Progesterone Repression of Luteinizing Hormone Beta-Subunit Gene Expression in Immortalized Pituitary Gonadotropes.

Department of Biology, University of Massachusetts, Amherst, MA, May 2008

Progesterone Regulation of LH and FSH Synthesis in the Pituitary Gonadotrope.

Endokrinologikum, Hamburg, Germany, March 2009

Synergy Between Progesterone and Activin Signaling Pathways Modulates FSH Synthesis in Pituitary Gonadotrope Cells.

Department of Obstetrics and Gynecology, University of Massachusetts Medical Center, Worcester, MA, June 2009

Molecular Mechanisms of Transcriptional Regulation in Pituitary Gonadotrope Cells.

Neuroendocrinology Focus Group, NICHD Specialized Cooperative Centers Program in Reproduction and Infertility Research, University of California, San Diego, La Jolla, CA, January 2010

Transcriptional Regulation of Gonadotropin Genes by Hormones in Synergy.

Department of Biology, University of Louisville, Louisville, KY, February 2010

Insights into Transcriptional Control of Pituitary Gonadotropin Genes.

Department of Reproductive Medicine Research Retreat, University of California, San Diego, La Jolla, CA, March 2010

Exploring the Role of FoxO1 in the Neuroendocrine Regulation of Reproduction.

Department of Biology, San Diego State University, San Diego, CA, April 2010

Progesterone Feedback in the Pituitary Regulates Gonadotropin Hormone Synthesis.

UCSD/UCLA Diabetes and Endocrinology Research Center Retreat, University of California, Los Angeles, Los Angeles, CA, December 2010

FoxO1 Suppresses GnRH Induction of the Luteinizing Hormone Beta-Subunit Gene.

NICHD Specialized Cooperative Centers Program in Reproduction and Infertility Research Research Meeting, Chicago, IL, May 2011

FoxO1 Regulation of LH Synthesis in Pituitary Gonadotrope Cells.

Department of Reproductive Medicine Research Retreat, University of California, San Diego, La Jolla, CA, September 2011

Control of Gonadotropin Hormone Synthesis in the Pituitary via FoxO Transcription Factors.

45th Annual Meeting of The Society for the Study for Reproduction, Pennsylvania State University, State College, PA, August 2012

FOXO Regulation of Gonadotropin Hormone Synthesis in Pituitary Gonadotropes.

Department of Reproductive Medicine Research Retreat, University of California, San Diego, La Jolla, CA, September 2013

Insights into Transcriptional Regulation of Gonadotropin Gene Expression.

Department of Biology, San Diego State University, San Diego, CA, October 2013

How a SNP Affects Fertility: Elucidating Regulatory Mechanisms of the FSHB Promoter.

National Centers for Translational Research in Reproduction and Infertility Research Meeting, National Institutes of Health, Bethesda, MD, May 2015

Letrozole Treatment of Pubertal Female Mice Results in Both Reproductive and Metabolic Phenotypes of Polycystic Ovary Syndrome.

Steroids, Metabolism and Female Reproduction Focus Group, National Centers for Translational Research in Reproduction and Infertility Research Meeting, National Institutes of Health, Bethesda, MD May 2015

The Intestinal Microbiome Is Altered in a Letrozole-Induced PCOS Mouse Model.

Department of Comparative Biosciences, College of Veterinary Medicine, University of Illinois at Urbana-Champaign, Champaign, IL, March 2016

Does the Gut Microbiome Play a Role in Polycystic Ovary Syndrome?

98th Annual Meeting of The Endocrine Society, Boston, MA, April 2016

The Gut Microbiome Is Altered in a Mouse Model of Polycystic Ovary Syndrome.

Steroids, Metabolism and Female Reproduction Focus Group, National Centers for Translational Research in Reproduction and Infertility Research Meeting, University of California, San Diego, La Jolla, CA, February 2017

Role of Single Nucleotide Polymorphisms in FSHB Transcription and Fertility.

Department of Endocrinology Grand Rounds, University of California, San Diego, La Jolla, CA, February 2017

Role of Genetic Variation in FSHB Transcription and Infertility.

Joint Scientific Update Meeting of The Androgen Excess and PCOS Society/Endocrine Society, Orlando, FL, April 2017

Using Mouse Models to Study the Role of the Gut Microbiome in PCOS.

National Centers for Translational Research in Reproduction and Infertility Research Meeting, National Institutes of Health, Bethesda, MD, May 2017

Letrozole-Induced Mouse Models of PCOS Have Distinct Metabolic Phenotypes in Pubertal and Adult Female Mice.

Department of Reproductive Medicine Research Retreat, University of California, San Diego, La Jolla, CA, September 2017

Exploring the Connection of the Gut Microbiome with Polycystic Ovary Syndrome.

15th Annual Meeting of Androgen Excess and PCOS Society, San Antonio, TX, October 2017
Co-Housing with Healthy Mice Ameliorates Reproductive and Metabolic Phenotypes in Letrozole-Induced PCOS Mouse Model.

Ferring Research Institute, Inc., December 2017

Using a Letrozole-Induced Mouse Model to Study Metabolic Dysregulation in Polycystic Ovary Syndrome.

100th Annual Meeting of The Endocrine Society, Chicago, IL, March 2018

Emerging Role of Gut Microbiota in PCOS.

Department of Microbiome Science, Max Planck Institute for Developmental Biology, Tübingen, Germany, July 2018

Hormones, Gut Microbes and Polycystic Ovary Syndrome.

1st International Center for Microbiome Innovation Meeting, La Jolla, CA, February 2019

Emerging Role of the Gut Microbiome in Polycystic Ovary Syndrome.

National Centers for Translational Research in Reproduction and Infertility Research Meeting, National Institutes of Health, Bethesda, MD, May 2019

FSHB Transcription Is Regulated by a Novel 5' Upstream Enhancer that Encompasses a Single Nucleotide Polymorphism Associated with PCOS.

Steroids, Metabolism and Female Reproduction Focus Group, National Centers for Translational Research in Reproduction and Infertility Research Meeting, Bethesda, MD, May 2019

Interactions between the Gut Microbiome and Polycystic Ovary Syndrome.

Department of Anatomy and Cell Biology, East Carolina University Brody School of Medicine, Greenville, NC, May 2019

Gut Microbes and Polycystic Ovary Syndrome.

Department of Obstetrics, Gynecology and Reproductive Sciences Research Retreat, University of California, San Diego, La Jolla, CA, September 2019

Role of the Gut Microbiome in Polycystic Ovary Syndrome

Osher Lifelong Learning Institute, University of California, San Diego Extension, La Jolla, CA, October 2019

What do microbes have to do with Polycystic Ovary Syndrome?

Massachusetts General Hospital, Reproductive Endocrine Unit, Boston, MA, March 2020

Emerging Role of the Gut Microbiome in Polycystic Ovary Syndrome.

Department of Nutritional Sciences, Cornell University, Ithaca, NY, September 2020
Hormones, Gut Microbes and Polycystic Ovary Syndrome.

Virtual Annual Meeting of the Androgen Excess and PCOS Society, November 2020
Androgen Exposure During Puberty Versus Adulthood Resulted in Distinct PCOS Phenotypes.

Virtual Ovarian Club Asia 2020 Meeting, December 2020
Microbiome and Polycystic Ovary Syndrome

Department of Molecular and Integrative Physiology, University of Michigan, Ann Arbor, MI
February 2021
Exploring the Connection of the Gut Microbiome with Polycystic Ovary Syndrome.

CONFERENCE PRESENTATIONS

Thackray, V.G., McSwiggen, J. and Pavco, P. (1996) Substrate Binding Site Modifications in Trans-Cleaving HDV Ribozymes. *1st Annual Meeting of the RNA Society*, Madison, WI

Nordeen, S., Wan, Y., **Thackray, V.G.,** Scruggs, J., and Housley, P. (1997) Green Fluorescent Protein-Tagged Steroid Receptors and Receptor Chimeras as Probes to Monitor Receptor Localization and Antagonist Action in Living Cells. *79th Annual Meeting of The Endocrine Society*, Minneapolis, MN

Thackray, V.G., Young, R., Hooper, J., and Nordeen, S.K. (1999) A Genetic System for the Study of Steroid Hormone Action. *81st Annual Meeting of The Endocrine Society*, San Diego, CA

Thackray, V.G., Young, R., Hooper, J., and Nordeen, S.K. (2000) Using a Genetic System to Study Estrogen Receptor Action. *Nuclear Receptors 2000 Keystone Symposium*, Steamboat, CO

Thackray, V.G., Edwards, D.P. and Nordeen, S.K. (2001) Restoration of Ligand Binding to Purified, Ligand-Free Progesterone Receptor and Recovery of Transcriptional Activity on Chromatin Templates *In Vitro*. *83rd Annual Meeting of The Endocrine Society*, Denver, CO

Thackray, V.G., Toft, D. and Nordeen, S.K. (2002) Beyond Chaperones: Maturation of the Progesterone Receptor Required for Transcriptional Competence. *Nuclear Receptor Superfamily 2002 Keystone Symposium*, Snowbird, UT

Thackray, V.G. and Nordeen, S.K. (2002) Reticulocyte Lysate Restores Progesterone Receptor-Dependent Transcription on Chromatin Templates. *Chromatin Structure and Activity 2002 Keystone Symposium*, Santa Fe, NM

Mellon, P.L., Coss, D., Bailey, J., Spady, T., Jacobs, S., McGillivray, S., **Thackray, V.G.,** Pernasetti F. (2003) Mechanisms of Interaction of GnRH, Activin, and Androgen in Regulation of the FSH Beta Gene in the Pituitary Gonadotrope. *Eighth International Pituitary Congress*, New York, NY (symposium presentation)

Thackray, V.G. and Mellon, P.L. (2004) Synergistic Regulation of FSH Beta Gene Transcription by Sex Steroid Hormone Receptors and Smad Proteins. *Nuclear Receptors: Steroid Sisters 2004 Keystone Symposium*, Keystone, CO

McGillivray, S, **Thackray, V.G.** and Mellon, P.L. (2004) Glucocorticoid Receptors and Activin Synergistically Regulate FSH Beta Subunit Gene Transcription. *Nuclear Receptors: Steroid Sisters 2004 Keystone Symposium*, Keystone, CO

Thackray, V.G. and Mellon, P.L. (2004) Activin and Sex Steroid Hormones Synergistically Regulate FSH Beta Subunit Gene Transcription. *86th Annual Meeting of The Endocrine Society*, New Orleans, LA

McGillivray, S, **Thackray, V.G.** and Mellon, P.L. (2004) Glucocorticoids and Activin Regulate Follicle Stimulating Hormone Beta Subunit Gene Transcription Synergistically. *86th Annual Meeting of The Endocrine Society*, New Orleans, LA

Coss, D., **Thackray, V.G.** and Mellon, P.L. (2004) Mechanisms of GnRH and Activin Induction of FSH β and LH β in L β T2 cells. *86th Annual Meeting of The Endocrine Society*, New Orleans, LA

Hunnicut, J., **Thackray, V.G.** and Mellon, P.L. (2005) Suppression of GnRH-Induced LH β -Subunit Gene Expression by Progesterone. *87th Annual Meeting of The Endocrine Society*, San Diego, CA

McGillivray, S, **Thackray, V.G.** and Mellon, P.L. (2005) Androgens, Progestins and Glucocorticoids Induce Follicle-Stimulating Hormone β -Subunit Gene Expression at the Level of the Gonadotrope. *87th Annual Meeting of The Endocrine Society*, San Diego, CA (oral presentation)

Nordeen, S.K., **Thackray, V.G.**, Parrish, J., and Toft, D. (2005) Role of Chaperones in Steroid Receptor-Chromatin Interactions. *87th Annual Meeting of The Endocrine Society*, San Diego, CA (oral presentation)

Thackray, V.G., Hunnicutt, J. and Mellon, P.L. (2006) Progesterone Regulates Follicle-Stimulating Hormone and Luteinizing Hormone Beta-Subunit Gene Expression in Immortalized Gonadotropes. *88th Annual Meeting of The Endocrine Society*, Boston, MA

Mellon, P.L., **Thackray, V.G.**, McGillivray, S., Sasson, R., Hunnicutt, J., Hand, C., Luu, S., and Coss, D. (2007) Hormones in Synergy: Regulation of the Pituitary Gonadotropin Genes. *89th Annual Meeting of The Endocrine Society*, Toronto, Canada (symposium presentation)

Thackray, V.G., Ghochani, Y. and Mellon, P.L. (2008) Progesterone Mediates Follicle-Stimulating Hormone Gene Expression in Pituitary Gonadotropes. *90th Annual Meeting of The Endocrine Society*, San Francisco, CA

Thackray, V.G., Mayo, S. and Mellon, P.L. (2009) The Forkhead Transcription Factor FoxO1 Modulates Gonadotropin Gene Expression in Pituitary Gonadotrope Cells. *91st Annual Meeting of The Endocrine Society*, Washington, D.C.

Breen, K., **Thackray, V.G.**, Coss, D., and Mellon P.L. (2009) RUNX Regulation of Follicle-Stimulating Hormone Beta-Subunit Gene Expression in Pituitary Gonadotropes. *91st Annual Meeting of The Endocrine Society*, Washington, D.C.

Thackray, V.G. and Mellon, P.L. (2009) Investigating the Role of the Forkhead Transcription Factor FoxO1 in Pituitary Gonadotrope Cells. *First Western Diabetes and Endocrinology Research Center Meeting*, La Jolla, CA

Ghochani, Y., Saini, J., Mellon, P.L., and **Thackray, V.G.** (2010) Synergy Between Activin and Progesterone on the Follicle-Stimulating Hormone Beta Promoter Requires FoxL2. *92st Annual Meeting of The Endocrine Society*, San Diego, CA

Arriola, D.J. Mayo, S. and **Thackray, V.G.** (2011) FoxO1 Inhibits Synthesis of Luteinizing Hormone Beta in Pituitary Gonadotrope Cells. *93rd Annual Meeting of The Endocrine Society*, Boston, MA

Mellon, P.L., **Thackray, V.G.** and Coss, D. (2011) Integration of Activin, GnRH and Steroid Hormone Action at the Pituitary Gonadotrope. *93rd Annual Meeting of The Endocrine Society*, Boston, MA (symposium presentation)

Skarra, D.V., Arriola, D.J. and **Thackray, V.G.** (2012) FOXO1 Inhibition of Follicle-Stimulating Hormone Beta Gene Expression. *94th Annual Meeting of The Endocrine Society*, Houston, TX

Parikh, R.V., Park, C.H. and **Thackray, V.G.** (2012) FOXO1 Diminishes Activin Signaling in Pituitary Gonadotrope Cells. *94th Annual Meeting of The Endocrine Society*, Houston, TX

Skarra, D.V., Arriola, D.J. and **Thackray, V.G.** (2012) FOXO1 Regulation of Luteinizing Hormone Beta Transcription. *Experimental Biology Meeting*, San Diego, CA

Park, C.H., Arriola, D.J. and **Thackray, V.G.** (2012) The Insulin Effector, FOXO1, Decreases Activin Induction of Follicle-Stimulating Hormone Beta Gene Expression. *UCSD Division of Biological Sciences Annual Research Showcase*, La Jolla, CA

Skarra, D.V. and **Thackray, V.G.** (2013) FOXO1 Is Regulated by Insulin/IGF and GnRH via Independent Signaling Pathways in Pituitary Gonadotropes. *95th Annual Meeting of The Endocrine Society*, San Francisco, CA

Rivera-Torres, M., Skarra, D.V. and **Thackray, V.G.** (2013) Dynamic Regulation of the Transcription Factor FOXO1 in Pituitary Gonadotrope Cells. *UCSD Summer Research Conference*, La Jolla, CA (oral presentation)

Skarra, D.V. and **Thackray, V.G.** (2013) Insulin/IGF and GnRH Regulation of FOXO1 in Pituitary Gonadotropes. *UCSD/UCLA Diabetes Research Center Annual Retreat*, University of California, San Diego, La Jolla, CA

Skarra, D.V. and **Thackray, V.G.** (2014) Insulin-Like Growth Factor I Regulation of FOXO1 in Gonadotropes. *Experimental Biology Meeting*, San Diego, CA

Park, C.H., Arriola, D.J., Skarra, D.V. and **Thackray, V.G.** (2014) Mechanisms of FOXO1 Down Regulation of Follicle-Stimulating Hormone Beta Gene Expression in Pituitary Gonadotrope Cells. *96th Annual Meeting of The Endocrine Society*, Chicago, IL

Skarra, D.V. and **Thackray, V.G.** (2014) Insulin/IGF and GnRH Regulate FOXO1 through PI3K/AKT and PKC Signaling Pathways in Gonadotropes. *96th Annual Meeting of The Endocrine Society*, Chicago, IL

Rivera-Torres, M., Skarra, D.V. and **Thackray, V.G.** (2014) Dynamic Regulation of the Transcription Factor FOXO1 in Pituitary Gonadotrope Cells. *96th Annual Meeting of The Endocrine Society*, Minority Mentoring and Poster Reception, Chicago, IL

Skarra, D.V. and **Thackray, V.G.** (2014) Insulin-Like Growth Factor I Regulation of FOXO1 in Gonadotropes. *Institutional Research and Academic Career Development Award Program Annual Meeting*, Albuquerque, NM

Jackson, L., **Thackray, V.G.** and Skarra, D.V. (2014) Insulin-Like Growth Factor I Regulation of AKT Activity in Uterine Myocytes *UCSD Summer Research Conference*, La Jolla, CA

Kauffman, A.S., **Thackray, V.G.**, Ryan, G.E., Poling, M.C., Chahal, N., Skarra, D.V., Tolson, K.P., Semaan, S.J., Glidewell-Kenney, C.A., Iwata, N., Breen, K.M., Duleba, A.J., Stener-Victorin, E., Shimasaki, S., Webster, N.J., and Mellon, P.L. (2015) Letrozole, an Aromatase Inhibitor, Recapitulates Both the Reproductive and Metabolic Phenotypes of Polycystic Ovarian Syndrome in Female Mice. *97th Annual Meeting of The Endocrine Society*, San Diego, CA (oral presentation)

Skarra, D.V., Park, C.H. and **Thackray, V.G.** (2015) *In Vitro* Methods to Investigate the Impact of Diabetes on Uterine Myocyte IGF1 Signaling during Pregnancy *UCSD/UCLA Diabetes Research Center Annual Retreat*, University of California, Los Angeles, Los Angeles, CA

Skarra, D.V., Anvar, A.R., Rivera, A.J., Taylor, M.S., Cornwell, T., and **Thackray, V.G.** (2015) High Fat Diet Diminishes Uterine Smooth Muscle Activity. *Institutional Research and Academic Career Development Award Program Annual Meeting*, San Diego, CA

Chen, J., Skarra, D.V. and **Thackray, V.G.** (2015) Investigating the role of the FOXO1 transcription factor in pituitary gonadotrope cells. *UCSD Summer Research Conference*, La Jolla, CA (oral presentation)

Roca, I. and **Thackray, V.G.** (2015) Is a SNP decreasing the function of the FSHB gene? *UCSD Summer Research Conference*, La Jolla, CA (oral presentation)

Ryan, G.E., Shojaei, S., Witham, E.A., Meadows, J.D., **Thackray, V.G.**, and Mellon, P.L. (2016) Androgen Receptor Regulation of GnRH Receptor in Male Pituitary Gonadotropes. *98th Annual Meeting of The Endocrine Society*, Boston, MA

Anvar, A.R., Skarra, D.V. and **Thackray, V.G.** (2016) Puberty Is Necessary to Fully Develop the PCOS Metabolic Phenotype. *UCSD Frontiers of Innovation Scholars Annual Symposium*, La Jolla, CA

Torres, P.J., Skarra, D.V., Anvar, A.R, Kelley, S.T., and **Thackray, V.G.** (2016) Puberty Is Important to Fully Develop the PCOS Metabolic Phenotype. *80th Annual Meeting of the Southern California American Society for Microbiology*, La Jolla, CA

Torres, P.J., Skarra, D.V., Anvar, A.R, Kelley, S.T., and **Thackray, V.G.** (2016) Puberty Is Important for Development of the Polycystic Ovary Syndrome Metabolic Phenotype in Female Mice. *UCSD Center for Microbial Innovation Changing Microbiomes for Health Symposium*, La Jolla, CA

Torres, P.J. Skarra, D.V., Anvar, A.R, Kelley, S.T., and **Thackray, V.G.** (2017) Letrozole Treatment of Adult Female Mice Does Not Result in the Full PCOS Metabolic Phenotype or Decreased Gut Microbial Diversity. *29th Annual California State University Annual Biotechnology Symposium (CSUPBERB)*, Santa Clara, CA

Thackray, V.G., Skarra, D.V., Hernández-Carretero, A., and Anvar, A.R. (2017) Letrozole Treatment of Pubertal Female Mice Results in Multiple Features of PCOS Metabolic Dysregulation. *99th Annual Meeting of The Endocrine Society*, Orlando, FL

Torres, P.J., Skarra, D.V., Anvar, A.R, **Thackray, V.G.**, and Kelley, S.T. (2017) The Impact of Puberty on the Development of PCOS Metabolic Phenotype and the Gut Microbiome. *American Society for Microbiology Microbe Meeting*, New Orleans, LA

Thackray, V.G., Bohaczuk, S. and Mellon, P.L. (2017) The Role of Single Nucleotide Polymorphisms in Follicle-Stimulating Hormone Synthesis and Fertility. *50th Annual Meeting of The Society for the Study of Reproduction*, Washington, D.C.

Sau, L. and **Thackray, V.G.** (2017) Investigating Role of Gut Microbiome in PCOS Metabolic Dysfunction. *UCSD Summer Research Conference*, La Jolla, CA (oral presentation)

Torres P.J., Siakowska, M., Banaszewska, B., Duleba, A.J., Kelley, S.T., and **Thackray, V.G.** (2017) Decreased Diversity of the Gut Microbiome in Women With Polycystic Ovary Syndrome Is Correlated with Hyperandrogenism. *15th Annual Meeting of the Androgen Excess and PCOS Society*, San Antonio, TX (oral presentation)

Torres P.J., Siakowska, M., Banaszewska, B., Duleba, A.J., Kelley, S.T., and **Thackray, V.G.** (2018) Decreased Diversity of the Gut Microbiome in Women With Polycystic Ovary Syndrome Is Correlated with Hyperandrogenism. *30th Annual California State University Annual Biotechnology Symposium (CSUPBERB)*, Santa Clara, CA

Torres P.J., Siakowska, M., Banaszewska, B., Duleba, A.J., Kelley, S.T., and **Thackray, V.G.** (2018) Decreased Diversity of the Gut Microbiome in Women With Polycystic Ovary Syndrome Is Correlated with Hyperandrogenism. *UCSD Center for Microbial Innovation Research Summit*, La Jolla, CA

Hernández-Carretero, A., Riopel, M., Ho, B.S., and **Thackray, V.G.** (2018) Letrozole Treatment of Pubertal Female Mice Results in Impaired Insulin Action in Skeletal Muscle. *100th Annual Meeting of The Endocrine Society*, Chicago, IL

Bohaczuk, S.C., **Thackray, V.G.** and Mellon P.L. (2018) FSH β Transcription is Regulated by a PCOS-Associated Single Nucleotide Polymorphism in a Novel 5' Upstream Enhancer. *100th Annual Meeting of The Endocrine Society*, Chicago, IL

McCosh, R.B., Tian, K., Ho., B.S., **Thackray, V.G.** and Breen, K.M. (2018) Metabolic Stress Suppresses Pulsatile Luteinizing Hormone Secretion in Mice. *100th Annual Meeting of The Endocrine Society*, Chicago, IL

Torres, P.J., Siakowska, M., Banaszewska, B., Pawelczyk, L., Duleba, A.J., Kelley, S.T., and **Thackray, V.G.** (2018) Gut Microbial Diversity in Women with Polycystic Ovary Syndrome Correlates with Hyperandrogenism. *American Society for Microbiology Microbe Meeting*, Atlanta, GA

Hernández-Carretero, A., Martins, V.F., Riopel, M., Ho, B.S., Schenk, S., and **Thackray, V.G.** (2018) Letrozole Treatment of Pubertal Female Mice Results in Impaired Insulin Action in Skeletal Muscle. *Experimental Biology Meeting*, San Diego, CA

Kauffman, A.S., Esparza, L.A., Ho, B.S., and **Thackray, V.G.** (2018) Increased LH Pulsatility and Arcuate Kisspeptin Gene Expression in a Mouse Model of PCOS. *9th International Congress of Endocrinology*, Toronto, Canada

Chen, A. and **Thackray, V.G.** (2018) Investigating the Effects of Exposure to Healthy Gut Microbiota PCOS Pathology via Cohousing. *UCSD Summer Research Conference*, La Jolla, CA (oral presentation)

Sau, L. and **Thackray, V.G.** (2018) Investigating Role of Gut Microbiome in PCOS Metabolic Dysfunction. *Endocrine Society Summer Research Conference Webinar* (oral presentation)

Torres, P.J., Ho, B., Arroyo, P., Sau, L., Chen, A., Kelley, S.T., and **Thackray V.G.** (2018) Exposure to a Healthy Gut Microbiome Improves Reproductive and Metabolic Phenotypes in a Mouse Model of Polycystic Ovary Syndrome. *22nd International Lake Arrowhead Microbial Genomics Conference*, Lake Arrowhead, CA

Torres, P.J., Ho, B., Arroyo, P., Sau, L., Chen, A., Quinn, R.A., Dorrestein, P.C., Kelley, S.T., and Thackray V.G. (2018) Cohousing Letrozole Induced PCOS Mice with Placebo Mice Results in Improvement of the PCOS Metabolic and Reproductive Phenotype. *1st Annual UC San Diego CMI Microbiome Meeting*, La Jolla, CA (oral presentation)

Arroyo, P., **Thackray, V.G.** and Kelley, S.T. (2019) Determining the organizational and activational effects of hyperandrogenism in a letrozole-induced mouse model of polycystic ovary syndrome. *31st Annual California State University Annual Biotechnology Symposium (CSUPBERB)*, Santa Clara, CA

Bohaczuk, S.C., **Thackray, V.G.** and Mellon P.L. (2019) A novel upstream enhancer acts synergistically with GnRH and activin to increase FSH β transcription. *101th Annual Meeting of The Endocrine Society*, New Orleans, LA (oral presentation)

Thackray, V.G., Torres, P.J., Ho, B., Arroyo, P., Sau, L., Chen, A., and Kelley, S.T. (2019) Gut Bacterial Composition in a Mouse Model Correlates with an Improved PCOS Phenotype After Co-Housing. *101th Annual Meeting of The Endocrine Society*, New Orleans, LA (oral guided poster session)

Sau, L., Chen, A., Ho, B., and **Thackray, V.G.** (2019) Investigating the Role of the Gut Microbiome in PCOS Metabolic Dysfunction. *101th Annual Meeting of The Endocrine Society*, New Orleans, LA

Bohaczuk, S.C., **Thackray, V.G.** and Mellon P.L. (2020) Identifying regulatory elements within a novel enhancer of *FSHB* containing two PCOS-associated single nucleotide polymorphisms. *102th Annual Meeting of The Endocrine Society*, San Francisco, CA

Esparza, L.A., Stevens, S., Ho, B.S., **Thackray, V.G.**, and Kauffman, A.S. (2020) Increased In Vivo Pulsatile LH Secretion and Hypothalamic Kisspeptin, NKB, and Dynorphin RNA Levels in a PCOS-Like Mouse Model *102th Annual Meeting of The Endocrine Society*, San Francisco, CA

Shah, R. and **Thackray, V.G.** (2020) Effects of Increased Fiber Diet on PCOS Metabolic Phenotype. *UCSD Summer Research Conference*, La Jolla, CA (oral presentation)