### CURRICULUM VITAE OREGON HEALTH & SCIENCE UNIVERSITY

DATE: February 2022

I. PRESENT POSITION AND ADDRESS		
Academic Rank:	<b>Professor with Tenure</b>	

Paul T. Spellman, Ph.D.

Department/Division:	Molecular & Medical Genetics
Professional Address:	2730 S. Moody Ave. Portland, OR 97201
E-Mail Address:	spellmap@ohsu.edu

### **II. EDUCATION**

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NAME

**Undergraduate and Graduate (Include Year, Degree, and Institution):** S.B., Biology, Massachusetts Institute of Technology, 1995

Ph.D., Genetics, Stanford University Medical School, 2000 Dissertation: "Generating and Analyzing Genome Scale Data"

Postgraduate (Include Year, Degree, and Institution):  $N\!/\!A$ 

Certification (Include Board, Number, Date, and Recertification):  $N\!/\!A$ 

Licenses (Include State, Date, Status, Number, and Renewal Date):  $N\!/\!A$ 

### **III. PROFESSIONAL EXPERIENCE**

#### Academic (Include Year, Position, and Institution): Administrative (Include Year, Position, and Institution):

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1995 - 2000	Graduate Student Research Assistant, Stanford University School of
	Medicine, Drs. David Botstein and Patrick O. Brown Advisors
2000 - 2003	Post-doctoral Fellow, UC Berkeley, Department of Molecular and Cellular
	Biology, Gerald M. Rubin Advisor
2003 - 2007	Scientist, Lawrence Berkeley Lab, Life Science Division
2007 - 2011	Staff Scientist, Lawrence Berkeley Lab, Life Science Division
2011	Special Assistant to the Deputy Director of the National Cancer Institute
2011 - 2013	Associate Professor, Oregon Health Sciences University, Department of
	Molecular and Medical Genetics

2012 - 2017 2013 -	Proposed Program Leader for Quantitative Oncology Knight Cancer Institute Professor, Oregon Health and Sciences University, Department of Molecular and Medical Genetics
2013 - 2014	Interim Director, Program in Computational Biology
2013 - 2015	Seminar Director, Program in Molecular and Cellular Biology
2017 -	Program Leader for Quantitative Oncology, Knight Cancer Institute
2017 -	Co-Director, CEDAR Center
2018 - 2020	Interim Director, Program in Computational Biology

### Other (Include Year, Position, and Institution):

### **IV. HONORS & AWARDS**

2018Penny and Phil Knight Endowed Professorship in Cancer Research Innovation2020AACR Team Science Award: THE CANCER GENOME ATLAS (TCGA)PILOT PROJECT

### V. SCHOLARSHIP

Area(s) of Research/Scholarly Interest: Cancer Genomics

### **Grants and Contracts:**

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Federal (Include Title, Source, PI, Amount Period, and % Effort, timeframe)

Systems-Based Predictions of Responses to Cancer Therapy. NIH/NCI U54 CA112970. \$250,000 Role: Project 1 Leader. (Gray, Joe W.) 50% effort. 09/30/04-08/31/10

NIH/NHGRI P41 G003619-01. Role: Project Leader. (Ball). 20% effort. 8/1/2005-7/31/2008

Development of cost effective sequence-based technologies to identify genome. Department of Energy DE-AC02-05CH11231. Role: Co-Principal Investigator (Pennachio) 5% effort. 10/1/05-9/30/07

*Development of RPPA data modules for caArray.* National Cancer Institute Y1-CO-6120-01. 135,000. Role: Spellman, Paul T. 10% effort. 09/19/06-07/31/09

Univ. of Calif., San Francisco (NIH/NCI Prime) U24 CA126477 Role: Scientist (Fisher, Susan J.) 20% effort. 09/26/06-08/31/11

*The Berkeley Cancer Genome Center* NIH/NCI. U24 CA126551 \$1,250,000 CoPI (Gray, Joe W.) 30% effort 09/28/06-08/31/10

*SPORE in Breast Cancer* Univ. of Calif., San Francisco (NIH/NCI Prime) P50 CA058207. \$53,820. Role: Co-investigator (van't Veer, L). 8% effort. 09/30/07-11/30/12

*TCGA Data Analysis Center at Berkeley* NIH/NCI U24 CA143799. \$537,280. Role: PI (Spellman, Paul T. et al.) 20% effort. 09/30/09-07/31/14 *Model-based Predictions of Responses to RTK Pathway Therapies*. NIH/NCI. U54 CA112970 \$520,700 Role: Project 1 PI and Data & Model Repository Core PI. (Gray, Joe W.) 17% effort. 09/1/10-02/28/15.

*Enhancing the Breadth and Efficacy of Therapeutic Vaccines for Breast Cancer*. DoD BC100597P1. \$383,443. Role: PI (Spellman, Paul T.) 30% effort 9/30/11-9/29/15

*Complications During Long-duration Space Missions* NSBRI/Baylor CA04201. \$232,073. (PI: Lindner) 0.36 calendar months 06/01/15-05/31/17.

*Extrinsic Perturbations of Cell Physiology and Associated Regulatory Networks* NIH/NHGRI U54HG008100. \$1,396,812. (PI: Gray). 0.6 calendar months 09/10/14-06/30/20

Intratumor heterogeneity underlying treatment resistance in HER2+ breast tumors NIH/NCI U01CA195469). \$165,999. (PI: Gray, Michor, Polyak, Spellman – Multip-PI) 0.84 calendar months 06/01/15-05/31/20

*Control of genetic and epigenetic instabilities by lincRNA genes* NIH/NIHMS R01GM114162 \$192,500. (PI:Thayer) 0.6 calendar months 09/17/15-06/30/19

*Integrative approach to heterogeneity in breast metastasis.* UCSF/NIH U01CA199315 \$166,414. (PI: Werb and Spellman) 1.8 calendar months 06/01/16-05/31/21

*OHSU Center for Specialized Data Analysis as part of the GDAN* NIH/NCI U24CA210957). \$273,900. (PI: Spellman / Margolin – Multi-PI 2.4 calendar months 09/13/16-08/31/21

Molecular Changes Associated with Initial Steps of Breast Cancer Metastasis for Risk Stratification and Therapy Development DOD/BCRP BC151431P1 \$148,059. (PI: Spellman). 0.48 calendar months 09/30/16-08/31/19

*Quantitative Oncology* NIH/NCI 5P30CA069533. \$190,837 total cost. (PI Spellman). 0.9 calendar months 07/01/17-06/30/22

*Evaluation of Population Based Testing for HBOC and Lynch Syndromes* \$4,627,812 direct costs. (MPI Spellman / Shannon). 1.2 cal. 06/10/2020-05/31/2025

*OHSU Center for Specialized Data Analysis as part of the GDAN* U24CA264007. \$369,600/year total cost. PI: Spellman / Ellrott – Multi-PI 2.4 calendar months 09/01/21-08/31/26

State and Local (Include Title, Source, PI, Amount Period, and % Effort) N/A Other Support (Include Title, Source, PI, Amount Period, and % Effort)

*Molecular Predictors of Drug Response in Breast Cancer* SmithKline Beecham Corporation Role: Scientist (Gray, Joe W.) 5% effort 01/27/06-01/26/10

MIPS Analysis The Buck Institute Role: PI (Spellman, Paul T.) 2% effort. 05/01/07-04/30/08

An Integrated Approach to Targeting Breast Cancer Molecular Subtypes and Their 'Resistance' *Phenotypes* University of California at Los Angeles (American Association for Cancer Research/Stand Up To Cancer, Prime) SU2C-AACR-DT0409. \$915,164 Role: Co-Investigator 10% effort (PI: Slamon, Dennis J. and Gray, Joe W.) 10/01/09 – 09/30/12

*The development of the ovarian cancer genome* Anna Fuller Fund \$100,000. Role: PI (Spellman, Paul T.) 0% effort 03/01/12-02/28/14

*Identification of breast cancer-specific antigen targets for development of anti-cancer vaccines* National Philanthropic Trust National Breast Cancer Coalition – Artemis Project. \$129,714. Role: PI 10% effort (Spellman, Paul T.) 8/1/12-7/31/13

*Restoring hormone sensitivity of late recurrences in breast cancer patients.* Promise Grant (O'Malley, Bert W) Susan G. Komen Foundation / Baylor College of Medicine. \$134,838. Role: Co-investigator (Gray) 2% effort 09/13/12-09/12/17

*Accelerator-Rich Architectures with Applications to Healthcare* Intel/UCLA. \$25,974 (PI: Cong) 0.6 calendar months 01/01/14-08/31/17

*ctDNA profiling to detect early recurrence* Prospect Creek Foundation \$238,096. (PI: Gray) 0.6 calendar months 10/01/15-09/30/17

*OHSU Center for Specialized Data Analysis as part of the GDAN*. NIH/NCI U24CA210957. \$273,900 (Spellman/Margolin) 2.4 cal 09/13/16-08/31/21

Molecular Changes Associated with Initial Steps of Breast Cancer Metastasis for Risk Stratification and Therapy Development DOD/U.S. Army Medical Research & Materiel Command BC151431P1.\$149,691 (Spellman) .48 cal mos. 09/30/16-09/29/19

*Integrative approach to heterogeneity in breast metastasis.* NIH/NCI U01CA199315 \$166,414. (Werb / Spellman – Multi-PI) 1.8 cal mos. 06/01/16-05/31/21

OHSU Knight Cancer Institute NIH/NCI P30CA069533 \$1,500,000. (Druker) 0.9 cal. Mos. 07/01/17-06/30/22.

Intratumor heterogeneity underlying treatment resistance in HER2+ breast tumors NIH/NCI U01CA195469 \$165,999 (Gray, Michor, Polyak, Spellman – multi-PI) 0.84 cal. mos. 06/01/15-05/31/20

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*ctDNA profiling to detect early recurrence* Prospect Creek Foundation \$158,730. (Gray) 0.6 cal. mos. 10/01/15-09/30/18

*Widespread Testing for Cancer Risk Syndromes* Knight Cancer Institute \$311,373. (Spellman). 09/01/17-08/31/18

### **Publications/Creative Work:**

### Peer-reviewed

DOCKE.

- P.T. Spellman, G. Sherlock, M. Q. Zhang, V. R. Iyer, K. Anders, M. B. Eisen, P. O. Brown, D. Botstein and B. Futcher. Comprehensive identification of cell cycle-regulated genes of the yeast Saccharomyces cerevisiae by microarray hybridization. *Molecular Biology of the Cell*. 9: 3273-97. 1998
- 2. M. B. Eisen, **P.T. Spellman**, P. O. Brown and D. Botstein. Cluster analysis and display of genome-wide expression patterns. *Proceedings of the National Academy of Sciences*, *U.S.A.* 95: 14863-8. 1998
- 3. G. Zhu, **P.T. Spellman**, T. Volpe, P. O. Brown, D. Botstein, T. N. Davis and B. Futcher. Two yeast forkhead genes regulate the cell cycle and pseudohyphal growth. *Nature*. 406: 90-4. 2000
- 4. D. T. Ross, U. Scherf, M. B. Eisen, C. M. Perou, C. Rees, **P. Spellman**, V. Iyer, S. S. Jeffrey, M. Van de Rijn, M. Waltham, A. Pergamenschikov, J. C. Lee, D. Lashkari, D. Shalon, T. G. Myers, J. N. Weinstein, D. Botstein and P. O. Brown. Systematic variation in gene expression patterns in human cancer cell lines. *Nature Genetics*. 24: 227-35. 2000
- 5. P. Gasch, **P. T. Spellman**, C. M. Kao, O. Carmel-Harel, M. B. Eisen, G. Storz, D. Botstein and P. O. Brown. Genomic expression programs in the response of yeast cells to environmental changes. *Molecular Biology of the Cell*. 11: 4241-57. 2000
- G. Sherlock, T. Hernandez-Boussard, A. Kasarskis, G. Binkley, J. C. Matese, S. S. Dwight, M. Kaloper, S. Weng, H. Jin, C. A. Ball, M. B. Eisen, P. T. Spellman, P. O. Brown, D. Botstein and J. M. Cherry. The Stanford Microarray Database. *Nucleic Acids Research*. 29: 152-5. 2001
- 7. R. A. George, J. P. Woolley and **P. T. Spellman**. Ceramic capillaries for use in microarray fabrication. *Genome Research*. 11: 1780-3. 2001
- 8. E. De Gregorio, **P. T. Spellman**, G. M. Rubin and B. Lemaitre. Genome-wide analysis of the Drosophila immune response by using oligonucleotide microarrays. *Proceedings of the National Academy of Sciences*, U.S.A. 98: 12590-5. 2001
- Brazma, P. Hingamp, J. Quackenbush, G. Sherlock, P. Spellman, C. Stoeckert, J. Aach, W. Ansorge, C. A. Ball, H. C. Causton, T. Gaasterland, P. Glenisson, F. C. Holstege, I. F. Kim, V. Markowitz, J. C. Matese, H. Parkinson, A. Robinson, U. Sarkans, S. Schulze-Kremer, J. Stewart, R. Taylor, J. Vilo and M. Vingron. Minimum information about a microarray experiment (MIAME)-toward standards for microarray data. *Nature Genetics*. 29: 365-71. 2001
- 10. **P. T. Spellman** and G. M. Rubin. Evidence for large domains of similarly expressed genes in the Drosophila genome. *Journal of Biology*. 1:5. 2002
- 11. **P. T. Spellman**, M. Miller, J. Stewart, C. Troup, U. Sarkans, S. Chervitz, D. Bernhart, G. Sherlock, C. Ball, M. Lepage, M. Swiatek, W. L. Marks, J. Goncalves, S. Markel, D. Iordan, M. Shojatalab, A. Pizarro, J. White, R. Hubley, E. Deutsch, M. Senger, B. J.

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