### **BIOGRAPHICAL SKETCH**

Provide the following information for the Senior/key personnel and other significant contributors in the order listed on Form Page 2. Follow this format for each person. **DO NOT EXCEED FOUR PAGES.** 

NAME Jennifer Rubin Grandis eRA COMMONS USER NAME (credential, e.g., agency login) jgrandis	POSITION TITLE Distinguished Professor of Otolaryngology & Pharmacology
EDUCATION/TRAINING (Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable.)	

residency hamming in applicable.				
INSTITUTION AND LOCATION	DEGREE (if applicable)	MM/YY	FIELD OF STUDY	
Swarthmore College	B.A.	05/1982	Art History, Biology	
University of Pittsburgh, Pittsburgh, PA	M.D.	05/1987	Medicine	

### A. Personal Statement:

I am dedicated to training the next generation of scientific investigators. I have served as PI of two NIH training grants (T32s) for nearly two decades. I am on the internal advisory boards of several T32s at the University of Pittsburgh and on the external advisory boards of a number of T32 programs at other institutions. I have received the University of Pittsburgh Provost's Award for Excellence in Mentoring in recognition of my commitment to mentoring. I am qualified and pleased to serve on the Internal Advisory Board (IAB) of the Training Grant in Endocrinology.

### **B.** Positions and Honors:

### **Positions & Employment**

1987-1988	Surgical Intern, University of Pittsburgh, Department of Surgery
1988-1993	Resident, University of Pittsburgh, Department of Otolaryngology
1991-1992	Research Fellow, University of Pittsburgh, Department of Medicine
1993-1998	Assistant Professor, University of Pittsburgh, Departments of Otolaryngology & Pharmacology (Secondary Appointment)
1999-2004	Associate Professor, University of Pittsburgh (with tenure)
1998-Present	Program Leader, Head & Neck Cancer Program, University of Pittsburgh Cancer Institute (UPCI)
2004-Present	Professor, University of Pittsburgh, Departments of Otolaryngology & Pharmacology (Secondary Appointment)
2005-Present	Vice Chair for Research, Department of Otolaryngology
2005-Present	UPMC Endowed Chair in Head and Neck Cancer Surgical Research
2010-Present	Assistant Vice Chancellor for Research Program Integration in the Health Sciences
2012-Present	Distiguished Professor of Otolaryngology
Other Experien	ce and Professional Memberships
2000-Present	Ad Hoc Metabolic Pathology (MEP) Study Section (NIH; Ad Hoc Subcommittee C, (NCI): Program Project Site Visits and Reviews (NCI, NCIC)
2001-2003	Member, Metabolic Pathology (MEP) Study Section (NIH)
2003-2006	Member & Chairperson, Tumor Cell Biology Study Section (NIH)
2008-2010	Member, Tumor Cell Biology Study Section (NIH)
2012-2017	Member, Board of Scientific Counselors, NIDCR (NIH)
2013-2015	Member, Basic Mechanisms of Cancer Therapeutics (BMCT) Study Section (NIH)
<u>Honors</u>	
1986	Alpha Omega A (AOA)
1987	M.D. Magna Cum Laude
2002	American Society of Clinical Investigation
2004	UPCI Scientific Leadership Award
2008	American Cancer Society Clinical Research Professorship
2009	University of Pittsburgh Chancellor's Distinguished Research Award

- 2010 American Association of Physicians
- 2011 University of Pittsburgh Provost's Award for Excellence in Mentoring
- 2012 University of Pittsburgh Distinguished Professor
- 2012 Alton Ochsner Award Relating Smoking and Disease
- 2012 Member, Institute of Medicine (IOM) of The National Academies
- 2012 NIH Pittman Lecturer

# C. Selected Peer-Reviewed Publications (from total of 245 original articles, 52 reviews/book chapters, and 1 book)

- Grandis JR, Zeng Q, Tweardy DJ. Retinoic acid normalized the increased gene transcription rate of TGF-alpha and EGFR in head and neck cancer cell lines. *Nature Medicine*. 1996 Feb; 2(2): 237-40. PMID: 8574972.
- 2. Forastiere AA, Trotti A, Pfister DG and Grandis JR. Head and neck cancer: recent advances and new standards of care. *Journal of Clinical Oncology*. 2006 Jun 10; 24(17): 2603-5. PMID: 16763271.
- Zhang Q, Thomas SM, Lui VWY, Xi S, Siegfried JM, Fan H, Smithgall T, Mills G, Grandis JR. Phosphorylation of TNF-alpha converting enzyme by gastrin-releasing peptide induces amphiregulin release and EGF receptor activation. *Proceedings of the National Academy of Sciences USA*. 2006 May 2; 103(18): 6901-6. Epub 2006 Apr 25. PMID: 16641105. PMCID: PMC1458991.
- 4. Zhang Q, Bhola NE, Lui VWY, Siwak DR, Xi S, Thomas SM, Gubish CT, Siegfried, Mills GB, Grandis JR. Antitumor mechanisms of combined GRPR and EGFR targeting in head and neck Cancer. *Molecular Cancer Therapeutics*. 2007 Apr; 6(4): 1414-24. PMID: 17431120.
- 5. Karamouzis M, Grandis JR, Argiris A. Therapies directed against epidermal growth factor receptor in aerodigestive carcinomas. *JAMA*. 2007 Jul 4; 289(1): 70-82. PMID: 17609492.
- Wheeler, SE, Suzuki S, Thomas SM, Sen M, Leeman-Neill RJ, Chiosea SI, Kuan CT, Bigner DD, Gooding WE, Lai SY, Grandis JR. Epidermal growth factor receptor variant III mediates head and neck cancer cell invasion via STAT3 activation. *Oncogene*. 2010 Sep 16; 29(37):5135-45. Epub 2010 Jul 12. PMID: 20622897. PMCID: PMC2940981.
- Lai SY, Koppikar P, Thomas SM, Childs E, Egloff AM, Seethala R, Branstetter BF, Gooding WE, Muthukrishnan A, Mountz JM, Lui VWY, Shin DM, Agarwala SS, Johnson R, Couture LA, Myers EN, Johnson JT, Mills G, Argiris A, Grandis JR. Intratumoral Epidermal Growth Factor Receptor antisense DNA therapy in head and neck cancer: first human application and potential antitumor mechanisms. *Journal of Clinical Oncology*. 2009 Mar 10; 27(8):1235-42. Epub 2009 Feb 9. PMID: 19204206. PMCID: PMC2667824.
- 8. Diergaarde B, Grandis JR. Human papilloma virus and head and neck cancer. *Oncology* (Williston Park). 2010 Sep; 24(10): 927, 933. PMID: 21138174. PMC Journal-not applicable.
- Bhola NE, Thomas SM, Freilino M, Joyce S, Sahu A, Maxwell J, Argiris A, Seethala R, Grandis JR. Targeting GPCR-mediated p70S6K activity may improve head and neck cancer response to cetuximab. *Clinical Cancer Research*. 2011 Aug 1; 17(15): 4996-5004. Epub 2011 Jun 8. PMID: 21653688. PMCID: PMC3149755.
- 10. Stransky N, Egloff AM, Tward A, Kostic A, Cibulskis K, Sivachenko A, Kryukov G, Lawrence M, Sougnez C, McKenna A, Ramos AH, Stojanov P, Carter SL, Voet D, Cortes M, Auclair D, Saksena G, Guiducci C, Onofrio R, Parkin M, Romkes M, Weissfeld J, Seethala RR, Wang L, Winckler W, Ardlie K, Gabriel SB, Myerson M, Lander ES, Getz G, Golub TR, Garraway LA, Grandis JR. The mutational landscape of head and neck squamous cell carcinoma. *Science*. 2011 Aug 26; 333(6046): 1157-60. Epub 2011 Jul 28. PMID: 21798893. PMCID: PMC3415217.
- Bhola N, Freilino M, Joyce SC, Sen M, Thomas SM, Sahu A, Cassell A, Chen CS, Grandis JR. Antitumor mechanisms of targeting the PDK1 pathway in head and neck cancer. *Molecular Cancer Therapeutics*. 2012 Jun; 11(6): 1236-46. Epub 2012 Apr 5. PMID: 22491800. PMCID: PMC3413198 [Available on 2013/6/1].
- Quesnelle KM, Wheeler SA, Ratay M, Grandis JR. Preclinical modeling of EGFR inhibitor resistance in head and neck cancer. *Cancer Biology & Therapy*. 2012 Aug; 13(10): 1-11. PMID: 22785204. PMCID: PMC3414414 [Available 2013/8/1].
- 13. Sen M, Thomas SM, Kim, SW, Yeh JI, Ferris RL, Johnson JT, Duvvuri U, Lee JA, Sahu N, Joyce S, Freilino ML, Shi H, Li C, Ly D, Rapireddy S, Etter JP, Li PK, Wang L, Chiosea S, Seethala RR, Gooding WE, Chen X, Kaminski N, Pandit K, Johnson DE, Grandis JR. First-in-human trial of a STAT3 decoy oligonucleotide in head and neck tumors: implications for cancer therapy. *Cancer Discovery*. 2012 Aug;

2(8): 694-705. Doi: 10.1158/2159-8290.CD-12-0191. Epub 2012 Jun 20. PMID: 22719020. NIHMSID: 468365. PMCID: PMC3668699.

Lui VW, Hedberg ML, Li H, Vangara B, Pendleton K, Zeng Y, Lu Y, Zhang Q, Du Y, Gilbert B, Freilino M, Sauerwein S, Peyser N, Xiao D, Diergaarde B, Wang L, Chiosea S, Seethala RR, Johnson JT, Kim S, Duvvuri U, Ferris RL, Romkes M, Nukui T, Ng P, Garraway L, Hammerman P, Mills GB, Grandis JR. Frequent mutation of the PI3K pathway in head and neck cancer defines predictive biomarkers. *Cancer Discovery*. 2013 Jul;3(7):761-9. PMID: 23619167. PMCID: PMC3710532.

15. Lui V, Peyser ND, Ng PK, Hritz J, Zeng Y, Lu Y, Hua L, Wang L, Gilbert BR, General IJ, Bahar I, Ju Z, Wang Z, Pendleton KP, Xiao X, Du Y, Vries JK, Hammerman PS, Garraway LA, Mills GB, Johnson DE, Grandis JR. Frequent mutation of receptor protein tyrosine phosphatases provides a mechanism for STAT3 hyperactivation in head and neck cancer. *Proc Natl Acad Sci* 2014 Jan 21;111(3):1114-9. PMID: 24395800. PMCID: PMC3903220.

## D. Research Support

#### **Ongoing Research Support** 2R01CA77308 Grandis (PI) 07/01/03-05/31/19 STAT-Mediated TGF-alpha /EGFR Signaling in SCCHN The major goal of this grant is to elucidate the role of STAT-mediated EGFR signaling in head and neck cancer. Role:PI 2R01CA098372 Grandis (PI) 04/01/04-06/30/19 **GRPR in SCCHN: Integration with EGFR** The major goal of this grant is to elucidate interactions between GRPR and EGFR in SCCHN. Role: PI 2P50CA097190 Grandis (PI) 07/01/02-06/30/15

## Specialized Program of Research Excellence (SPORE) in Head and Neck Cancer NIH (NCI)

The goal of this program is to improve the prevention, detection, and treatment of head and neck cancer through translational research.

07/01/08-06/30/18

Role: PI

CRP-08-229-01 Grandis (PI)

## American Cancer Society Clinical Research Professorship

American Cancer Society

The goal of this grant is to develop bedside-to-bench research strategies in head and cancer. Role: PI

2T32CA060397 Grandis (PI) 09/01/05-08/31/14

Postdoctoral Research Training in Head and Neck Oncology NIH (NCI)

The major goal is to train Otolaryngologists for careers that combine cancer research with clinical practice. Role: PI

2T32DC000066 Grandis (PI) 07/01/03-06/30/18

Research Training in Otolaryngology

NIH (NIDCD)

The major goal of this grant is to train Otolaryngologists for a career that combines research and clinical practice.

Role: PI

29XS131 Grandis (PI) 07/02/10-05/11/14 Discovery of Optimization Inhibitors of STAT3 Activation for the Treatment of SCCHN (Chemical Biological Consortium – Task Order 6)

SAIC Frederick, Inc.

The overall aim of this proposal is to screen chemical libraries to identify selective inhibitors of STAT3 tyrosine phosphorylation and nuclear translocation Role: PI

NIH/NCI	urgh Cancer Ćenter Core Grant ct is to build and maintain a Head	08/01/04-07/31/15 and Neck Research Program in a Comprehensive
1K07 CA137140 Genomic and Protect NIH Academic Careet Role: Mentor		09/04/09-08/31/14 Neck Cancer Risk and Prognosis
F31DE024007 Genomic alteration NIH Role: Mentor	Peyser (PI) of PTPRT in OSCC: Implication	09/01/13-08/31/16 s for STAT3 pathway targeting
PENDING Research	<u>Support</u>	
R01DE023685 <b>PI3KPathway Mutati</b> NIH Role: PI	Grandis (PI) ions in Head and Neck Cancer	04/1/14-01/31/19
F30CA180235-01 <b>Phosphoinositol-3-ł</b> NIH Role: Mentor		09/01/14-08/31/17 Critical Mitogenic Drivers in Head and Neck Cancer
5K08DE019201 Concurrent Inhibitio	h Support (past 3 years) Kim (PI) on of EGFR and VEGFR in Oral a I Scientist Development Award	09/02/08-06/30/13 Squamous Cell Carcinoma
F31DE020947 <b>Resistance to EGFR</b> PhD NRSA fellowship Role: Mentor	Quesnelle (PI) - <b>Targeting Agents in OSCC</b> o grant	08/01/10-05/31/12
	Wheeler (PI) n, signaling and treatment in SC dental and cranial research o grant	11/01/10-04/30/12 CC of head and neck