

**IceCube M&O MoU SOW Summary v8.3 2010.0518.xls**  
**M&O Core & In-Kind - Authors**

v 8.3 , May 18, 2010			Authors Head Count			M&O Responsibilities funded by NSF M&O Core & Inst. In-Kind (FTE)					
Funding Agency	Institution (Lead)		Ph.D. scientists	Faculty	Scientists / Post Docs Ph.D. Students	WBS 2.1 Program Management	WBS 2.2 Detector Operations & Maintenance	WBS 2.3 Computing & Data Management	WBS 2.4 Triggering & Filtering	WBS 2.5 Data Quality, Reconstruction & Simulation Tools	Total
NSF	University of Alabama (Dawn Williams)		2	(1 1 2)			0.63			0.45	1.08
NSF	University of Alaska (Katherine Rawlins)		1	(1 0 0)			0.02			0.40	0.42
NSF	Clark Atlanta (George Japaridze)		1	(1 0 0)			0.02				0.02
NSF	Georgia Tech (Ignacio Taboada)		2	(1 1 1)		0.25	0.23	0.20	0.00		0.68
NSF	LBNL (Spencer Klein)		7	(3 4 1)		0.15	0.89	0.20	0.25	0.80	2.29
NSF	Ohio State University (James Beatty)		3	(1 2 1)		0.05	0.23		0.15	0.10	0.53
NSF	Pennsylvania State University (Doug Cowen)		6	(3 3 2)		1.05	0.06	0.42	0.78	0.53	2.83
NSF	Southern University (Ali Fazely)		4	(3 1 0)			0.02	0.30		0.60	0.92
NSF	University of California, Berkeley (Buford Price)		3	(1 2 1)		0.20	0.78		0.25	0.50	1.73
NSF	University of California, Irvine (Steve Barwick)		2	(1 1 1)			0.02				0.02
NSF	University of Delaware (Paul Evenson, acting for T. Gaisser)		8	(4 4 2)		0.30	1.30	0.15	0.10	1.15	3.00
NSF	University of Kansas (Dave Besson)		1	(1 0 0)		0.10	0.02				0.12
NSF	University of Maryland (Greg Sullivan)		7	(4 3 6)		0.70	0.54	1.00	1.00	1.40	4.64
NSF	University of Wisconsin, River Falls (Jim Madsen)		3	(2 1 0)		0.25	0.05			0.30	0.60
NSF	University of Wisconsin, Madison (Albrecht Karle)		18	(5 13 12)		1.38	2.22	1.45	0.95	2.35	8.35
<b>U.S. Institutions Subtotal</b>			<b>68</b>	<b>(32 36 29)</b>		<b>4.43</b>	<b>7.02</b>	<b>3.72</b>	<b>3.48</b>	<b>8.58</b>	<b>27.22</b>
DESY	DESY-Zeuthen (Christian Spiering)		8	(6 2 6)		0.25	0.83	2.75	0.20	0.30	4.33
BMBF	RWTH Aachen (Christopher Wiebusch)		3	(1 2 12)		0.20	0.09	1.45	0.40	0.80	2.94
BMBF	Universität Dortmund (Wolfgang Rhode)		1	(1 0 4)			0.03	0.65		0.20	0.88
BMBF	Universität Mainz (Lutz Köpke)		1	(1 0 7)		0.15	1.00	0.45		0.20	1.80
BMBF	Universität Wuppertal (Klaus Helbing)		3	(2 1 7)		0.40	0.60	0.40	0.20	0.50	2.10
BMBF	Humboldt Universität Berlin (Hermann Kolanoski)		2	(1 1 0)		0.15	0.13		0.40	0.10	0.78
BMBF	Universität Bochum (Julia Becker)		2	(1 1 1)		0.10	0.03			0.70	0.83
DFG	MPI Heidelberg (Elisa Resconi)		2	(1 1 3)		0.50	0.05			0.60	1.15
DFG	Universität Bonn (Marek Kowalski)		2	(1 1 2)		0.10	0.53		0.55	0.40	1.58
FNRS	Universite Libre de Bruxelles (Daniel Bertrand)		4	(2 2 3)		0.30	0.23	0.50	0.20		1.23
FNRS	Universite de Mons (Evelyne Daubie)		1	(1 0 1)			0.03	0.30			0.33
FWO	University of Gent (Dirk Ryckbosch)		3	(1 2 4)		0.10	0.03			0.50	0.63
FWO	Vrije Universiteit Brussel (Catherine de Clercq)		6	(2 4 1)			0.06	0.25	0.50	1.75	2.56
SRC	Stockholm University (Per Olof Hulth)		6	(4 2 2)		0.60	0.06	0.70	0.80	0.55	2.71
SRC	Uppsala University (Olga Botner)		4	(3 1 3)		0.80	0.03		0.50	0.20	1.53
NSERC	University of Alberta (Darren, Grant)		2	(1 1 0)				0.10	0.00	0.40	0.50
	University of the West Indies, Barbados (Suruj Seunarine)		1	(1 0 0)					0.15	0.15	0.30
STFC	University of Oxford (Subir Sarkar)		1	(1 0 0)			0.02			0.10	0.12
MARSDEN	University of Canterbury (Jenni Adams)		2	(1 1 3)			0.12			0.50	0.62
JSPS	Chiba University (Shigeru Yoshida)		3	(1 2 3)			0.03		0.40	0.60	1.03
SNSF	Ecole Polytechnique Federale de Lausanne (Mathieu Ribordy)		2	(1 1 2)		0.10	0.03			0.25	0.38
<b>Non-U.S. Institutions Subtotal</b>			<b>59</b>	<b>(34 25 64)</b>		<b>3.75</b>	<b>3.93</b>	<b>7.55</b>	<b>4.30</b>	<b>8.80</b>	<b>28.33</b>
<b>Total U.S. &amp; Non-U.S.</b>			<b>127</b>	<b>(66 61 93)</b>		<b>8.18</b>	<b>10.94</b>	<b>11.27</b>	<b>7.78</b>	<b>17.38</b>	<b>55.54</b>